

Bloomberg Businessweek

"It's an amazing time to be a woman"

"I don't know what it means to have it all"

"Why aren't there more women Fortune 500 CEOs? Is it because women can't have it, or because they don't want it?"

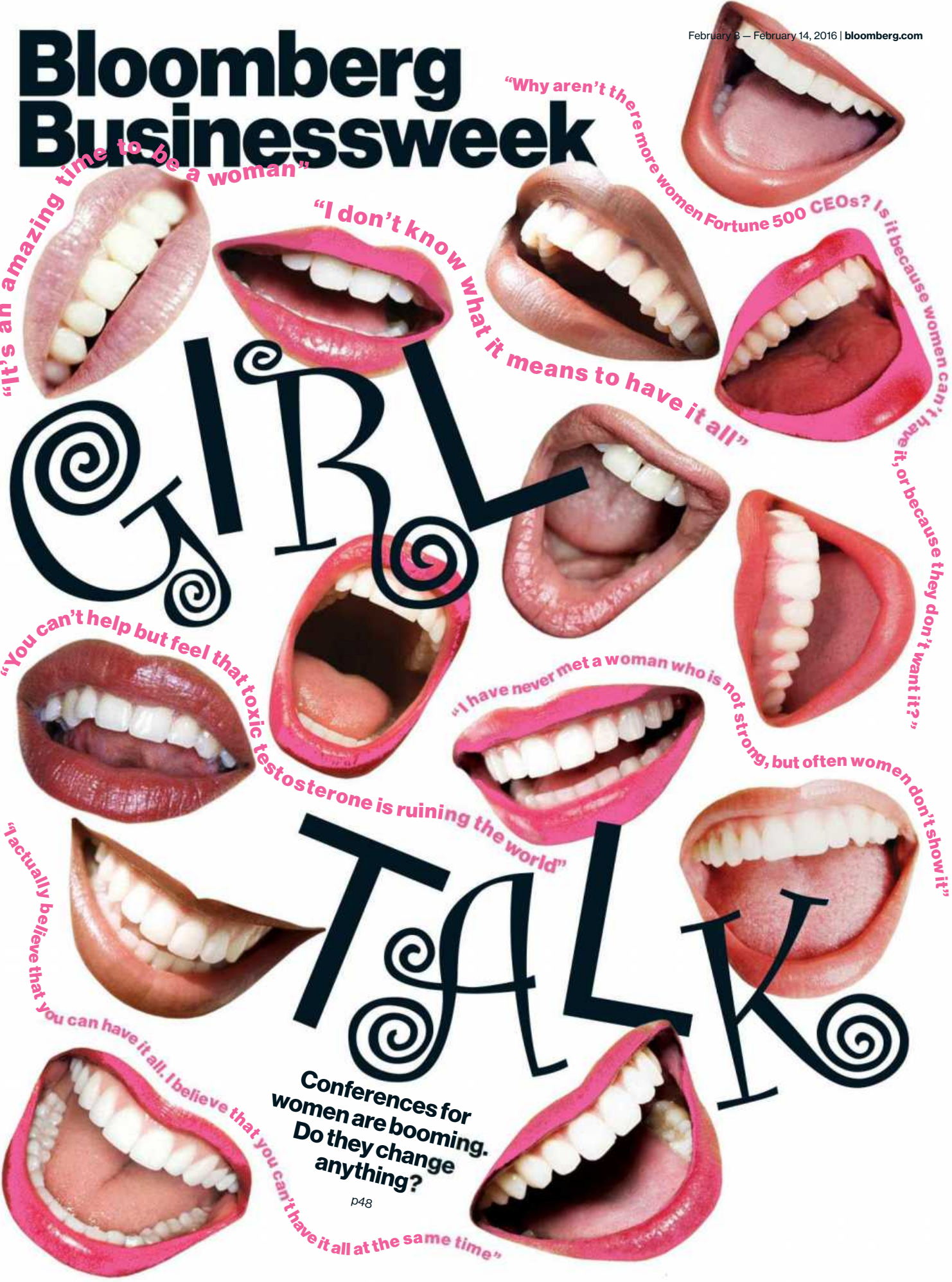
"You can't help but feel that toxic testosterone is ruining the world"

"I have never met a woman who is not strong, but often women don't show it"

"I actually believe that you can have it all. I believe that you can't have it all at the same time"

Conferences for women are booming. Do they change anything?

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"The cover story's about the boom in the women's conference industry."

"What are the conferences about?"

"Being a woman in the workforce."

"That seems like an extremely complicated issue, given the history of women's rights and the evolution of gender roles."

"Very complicated."

"So how do they approach it?"

"By inviting successful women to tell their stories and share their opinions."

"And how can women who attend implement what they learn?"

"Hard to tell. One problem is that a woman's biggest obstacle can be navigating a male-dominated workplace. But men aren't going to the conferences, so they aren't necessarily receptive to change."

"It's only women going to these conferences?"

"Just about, yes."

"And only women speaking?"

"Mostly, yes."

"And who interviews them?"

"Women."

"So it's women listening to women talk to women about women?"

"Yes."

"I have an idea."



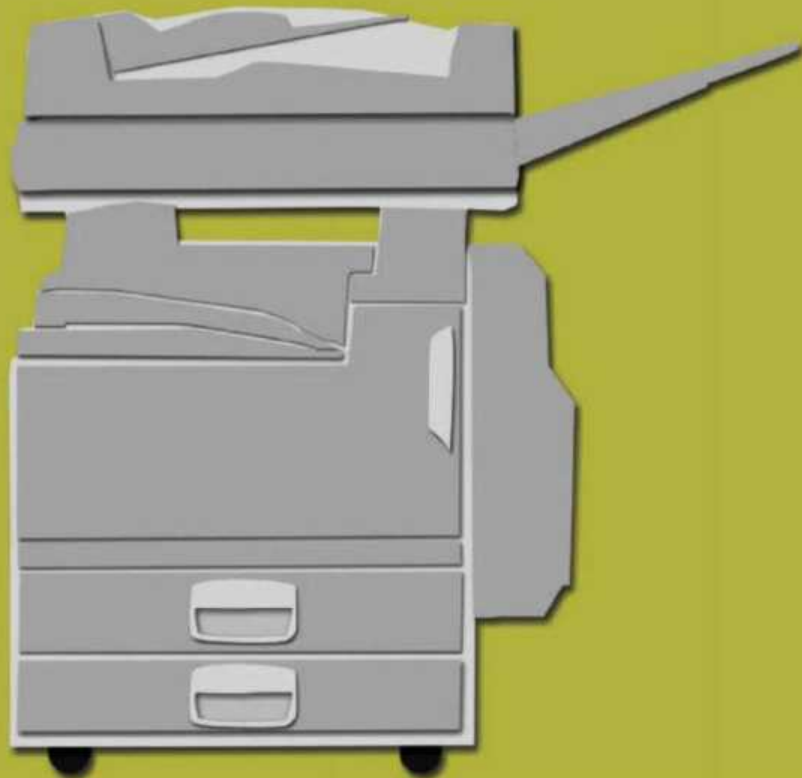
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Corrections & Clarifications

"How Did I Get Here?" (Etc., Feb. 1-Feb. 7, 2016) misspelled Anna Maria Chávez's middle name. It also misidentified Janet Napolitano's political party; she is a Democrat.



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The Great GOP Realignment

By Joshua Green

Cruz and Trump may herald an historic working-class Republican revolt against the party establishment

A few days before the Feb. 1 Iowa caucuses, Brad Martsching was barreling down a Pennsylvania highway, hoping to unload his eighteen-wheeler in time to get back home to Indianola, south of Des Moines, and participate for the very first time in the opening ritual of the presidential primary process. Martsching, 46, had settled on Ted Cruz over Donald Trump, but was mostly nursing his disgust at Republican leaders. “I’m a conservative. I want the Constitution to be our law, not political correctness,” he said. “I want a smaller government with less control of our personal lives and more control of our border, our finances, and our safety as a nation.” Republican lawmakers kept frustrating him by ignoring their campaign promises. “We get people that run as conservative and even get Tea Party support—they wear that lapel pin

proudly,” he said. “But when they leave for Washington, they leave it on their dresser at home.”

Martsching was fed up. A lot of other Iowans were, too. So they handed a victory to Cruz, who infuriated Republican leaders by engineering the 2013 government shutdown. And they made Trump, who’s equally unpopular in Washington, a close second. Add Cruz’s 28 percent to Trump’s 24 percent, and more than half of caucusgoers supported an outsider openly despised by the GOP establishment. Voters had heeded party elders for decades by nominating establishment figures such as Bob Dole, George W. Bush, John McCain, and Mitt Romney. The Iowa result was nothing less than a revolt, and the message to Republican leaders unmistakable: Drop dead!

It’s easy to view this year’s Republican primary as a cult of personality and no more—the rise and fall of a colorful billionaire who stars in the greatest reality show on television. But what’s happening is much broader than Trump and Cruz. It’s an extension of a shift in Republican politics that’s been under way for several years. Although the media is portraying the outcome in Iowa as a repudiation of Trump, it’s better understood as a repudiation of the party establishment—just the latest in a series of uprisings dating to the 2010 election. At the congressional level, the GOP has already realigned itself to reflect this anger. Almost 60 percent of House Republicans were elected in 2010 or after. They’ve radicalized their party in Congress and driven out its establishment-minded speaker, John Boehner.

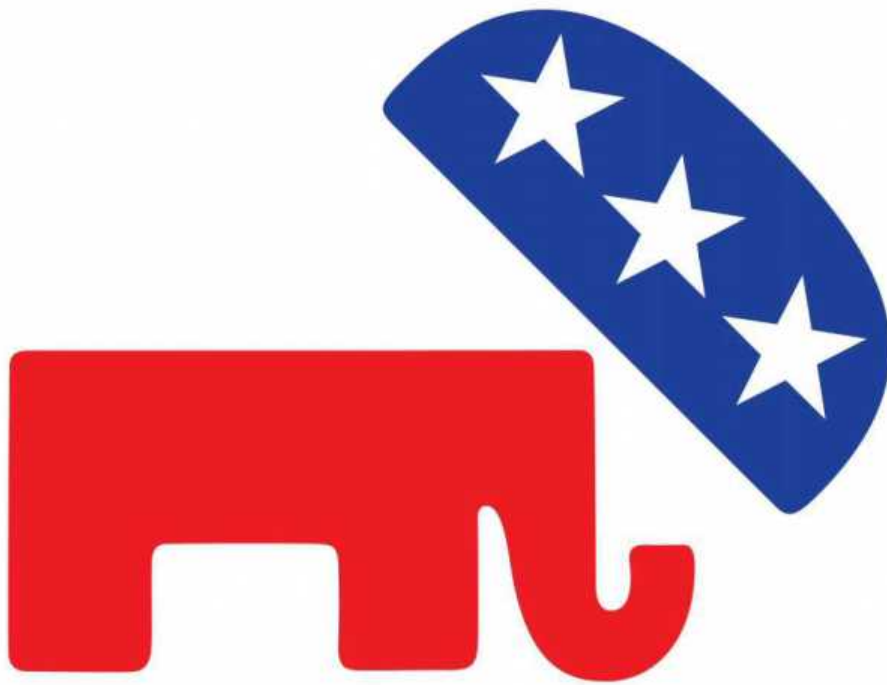
In the eyes of Republicans like Martsching, that isn’t enough. “Over the last six years, the nation has replaced almost all the liberals who voted for Obama’s programs with Republicans,” he said. “So why do they keep giving him things anyway? They’re simply not responsive. They have a different set of priorities. It’s crony capitalism.”

For all that the media fixated on Trump and Cruz, the Iowans I spoke to were more preoccupied with a litany of economic and cultural frustrations. The same complaints came up again and again—so did their antipathy toward their own party’s leaders in Washington, who, just about everyone agreed, had stopped listening to them entirely. “Out here in the cheap seats, those people are the ones that are our biggest enemy,” said Myron Brenner, 61, a heavy-equipment operator in Wallingford who caucused for Cruz.

Cruz’s victory came as a mild surprise, in part because the last 10 public polls showed Trump winning by an average of 7 points, and in part because the media long ago cast the mogul as the lead actor in the Republican drama. Trump’s outlandish behavior and attacks on Muslims, immigrants, China, the Obama administration, and the “idiots” and “losers” opposing him made him seem like the embodiment of the anger and anxiety coursing through the Republican electorate. “I want to win Iowa,” Trump declared in Cedar Rapids on caucus day. “It’s going to send such a great message that we’re not going to take it. We’re not going to take it anymore.”

While Trump didn’t prevail, his message did: Cruz, and even third-place finisher Marco Rubio, echoed the same





dark themes of nativism, treachery, and corruption. Like Trump, Cruz presented himself as the savior of disaffected working-class Americans who are routinely sold out by a “Washington cartel” that encompasses the leaders of both parties. (In a sense, Cruz won by running as a pious Trump with a better turnout operation.) Rubio engineered his last-minute surge by abandoning the sunny “New American Century” pitch he’d been making for months and appealing to “all of us who feel out of place in our own country.”

Iowa doesn’t decide the nominee. But it does send a clear signal about the direction a party’s taking. According to the entrance/exit poll, 65 percent of GOP caucusgoers believed that “new ideas and a different approach” were the most important qualities a candidate should possess. Cruz and Trump have distinctive styles—Cruz touts his ideological purity, Trump his personal strength—but both offer the same basic diagnosis of what’s ailing the country, who’s to blame, and what must be done to fix it.

That they’re resonating so strongly with voters suggests that the same wave that’s swept through Congress since 2010 is now engulfing the presidential campaign. As Patrick Buchanan, the former Nixon aide who won a 1996 New Hampshire primary upset by running as a populist proto-Trump, told the *Washington Post*: “The anger and alienation that were building then have reached critical mass now, when you see Bernie Sanders running neck and neck with Hillary Clinton in Iowa and New Hampshire and Trump and Ted Cruz with a majority of Republican

voters. Not to put too fine a point on it, the revolution is at hand.”

The question now is what effect this revolution will have on the Republican Party. Will its voters nominate Cruz or Trump, each of whom party insiders believe could suffer a loss that would rival Barry Goldwater’s landslide defeat in the 1964 election? Will the party break apart if they do? Or will Rubio or some other establishment-friendly alternative manage to harness this anger and prevail? And what then?

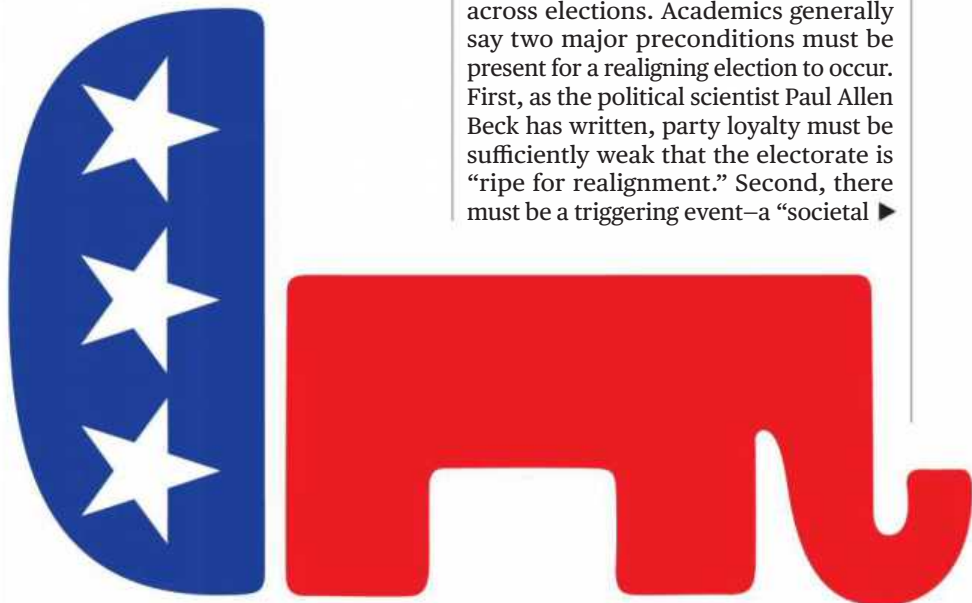
It’s too soon to say. But a Republican electorate increasingly composed of working-class white voters who suffer disproportionately from stagnant wages and dim prospects appears to have lost faith in party leaders more interested in pursuing high-end income tax cuts and

immigration reform. Given the political and economic climate, history offers an intriguing framework for what could happen next.

In 1955 the famed political scientist V.O. Key published “A Theory of Critical Elections,” an article popularizing the idea that certain elections in American history were more meaningful than the rest because “the decisive results of the voting reveal a sharp alteration of the pre-existing cleavage within the electorate.” This became known as realignment theory. Realigning elections, Key believed, create “sharp and durable” changes in the polity that can last for decades.

American historians generally see five or six elections as realigning: 1800, when Thomas Jefferson’s victory crippled the Federalist Party and shifted power from the North to the South; 1828, when Andrew Jackson’s win gave rise to the two-party system and two decades of Democratic control; 1860, when Abraham Lincoln’s election marked the ascendancy of the Republican Party and the secessionist forces that led to the Civil War; 1896, when William McKinley and a new urban political order were swept into power by a depression and industrialization; and 1932, during the Great Depression, when Franklin Roosevelt’s triumph marked the beginning of three decades of Democratic dominance. Some historians argue that Ronald Reagan’s 1980 victory, primed by the stagflation of the 1970s, was also realigning.

Political scientists don’t all subscribe to this theory. It’s more of a conceptual scheme, anyway, since it offers little in the way of predictive power. But it’s a useful way to analyze political change across elections. Academics generally say two major preconditions must be present for a realigning election to occur. First, as the political scientist Paul Allen Beck has written, party loyalty must be sufficiently weak that the electorate is “ripe for realignment.” Second, there must be a triggering event—a “societal ►



◀ trauma,” Beck calls it—such as a war or a depression. Throughout history, wars and depressions have failed to cause big shifts because voters weren’t primed for one. Likewise, periods of voter alienation didn’t cause enduring swings between the parties because there was no triggering event. But when the proper conditions are present, they produce “concentrated bursts of change” that cause turmoil in the presidential nominating process, the political scientist Walter Dean Burnham wrote.

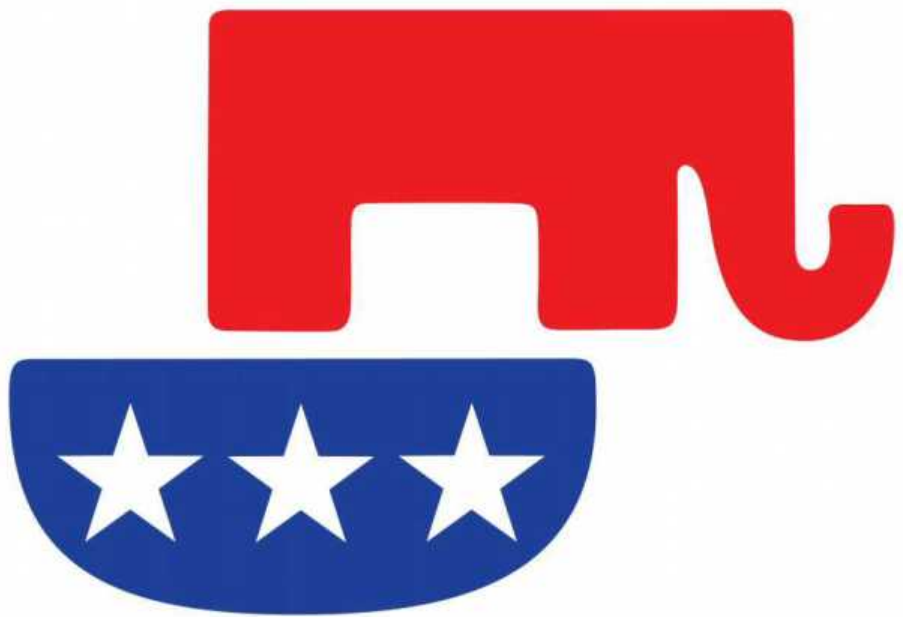
Realignment theory was popular in the 1960s and ’70s, but it’s faded since, because the American electorate has become polarized to the point where long periods of single-party dominance no longer happen. But realignments can still occur. They’re just more likely to happen within parties, rather than between them.

In hindsight, the 2010 election looks like it may have set off, or at least accelerated, a shift within a Republican Party that, in the 30 years since Reagan took office, has oriented itself around free markets, a smaller safety net, foreign adventurism, and low marginal tax rates for the wealthy. As Cruz and Trump have demonstrated, a large subsection of Republican voters—possibly a majority—are no longer satisfied with this arrangement.

Both of the necessary preconditions for a realignment are present. The Great Recession of 2007-09 supplied the catalytic societal trauma: Pew Research Center data show Republican anger at Washington spiked before the 2010 election and has never fallen. And no one who’s turned on a television or attended a Republican rally can doubt for a minute that attachment to party leaders is at a low ebb.

Even if you don’t subscribe to realignment theory, the 2010 election is still a useful demarcation in understanding the Republican primary campaign. Every candidate who’s caught fire this cycle came to political prominence after 2010: Trump, Cruz, Rubio, Ben Carson, and Carly Fiorina all fit this bill. Those who have disappointed the most are generally products of the era before then: Jeb Bush, Chris Christie, and John Kasich come to mind.

Looking back, it’s clear that the forces upending the 2016 presidential primaries were also present in 2012. We just weren’t looking for them. As they did this cycle,



Republicans toyed with nominating goofy flimflam artists such as Herman Cain and Michele Bachmann before settling on former Pennsylvania Senator Rick Santorum as the main rival to Romney, the establishment favorite.

Santorum’s outspoken social conservatism has always caused him to be viewed as a candidate of the religious right. But in 2012 he spoke to many of the same blue-collar anxieties that Trump and Cruz have tapped into, proposing a mix of protectionism, infrastructure spending, revived manufacturing, and a purifying sweep of corrupt Washington leaders as the remedy for economic and cultural stagnation. “It was certainly, at the very least, a precursor to 2016,” says John Brabender, Santorum’s chief strategist.

Santorum’s most striking TV ad that year (“Rebellion”) was one Brabender created that showed working-class voters being blindfolded and marched off a cliff by an executive with a bullhorn—a stand-in for the GOP leadership. “The establishment is once again telling us to fall in line,” a narrator said, “and vote for their backroom, handpicked moderate candidate.” Santorum went on to win 11 states.

The intervening years, Brabender

believes, have only deepened this voter sentiment: “People are no longer saying ‘Who am I supposed to vote for? Lead me there.’ Everything since then has solidified that feeling of being abandoned and made them more angry.” It’s no wonder audiences always respond to Cruz’s shouted stump-speech admonition, “If you see a candidate who Washington embraces, turn and run!”

As the primaries took shape over the past six months, the big fight has been less oriented around ideology and more oriented around class. According to the Iowa entrance/exit polls, Cruz and Trump were, respectively, the top choice of “very conservative” and “moderate” caucusgoers. Rubio won “somewhat conservative”—those in between. Where Trump and Cruz divide most sharply from Rubio is in their supporters’ education level. Rubio handily won voters with a postgraduate degree; Trump and Cruz performed best among voters with a high school degree or less (Trump) or some college (Cruz). A Cruz or Trump win would signify that working-class voters will no longer be forsaken by their party leaders in favor of a class of wealthy campaign donors.

Perhaps, as they did in Iowa, Trump and Cruz will stay focused on each other, allowing the new, angrier Rubio to eke out a win. Regardless, the signal Republican voters are sending is clear. From here on out, the contest will be about which candidate should deliver that message to Washington. **B**

Can Rubio or some other establishment-friendly alternative harness this anger? What then?

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Run Simple

Bring On The Cashless Future

**National digital currencies seem daunting,
but they'll benefit governments and taxpayers**



Cash had a pretty good run for 4,000 years or so. These days, though, notes and coins increasingly seem déclassé: They're dirty and dangerous, unwieldy and expensive, antiquated and so very analog.

Sensing this dissatisfaction, entrepreneurs have introduced hundreds of digital currencies in the past few years, of which bitcoin is only the most famous. Now governments want in: The People's Bank of China says it intends to issue a digital currency of its own. Central banks in Ecuador, the Philippines, the U.K., and Canada are considering similar ideas. At least one company has sprung up to help them along.

Much depends on the details, of course. But it's a welcome trend. In theory, digital legal tender could combine the inventiveness of private virtual currencies with the stability of a government mint. Most obviously, such a system would make moving money easier. Properly designed, a digital fiat currency could move seamlessly across otherwise incompatible payment networks, making transactions faster and cheaper. It would be of particular use to the poor, who could pay bills or accept payments online without a bank account or make remittances without getting gouged.

For governments and their taxpayers, potential advantages abound. Issuing digital currency would be cheaper than printing bills and minting coins. It could improve calculations of statistical indicators, such as inflation and gross domestic product. Traceable transactions could help inhibit terrorist financing, money laundering, fraud, tax evasion, and corruption. The most far-reaching effect might be on monetary policy: Central banks would no longer be hampered by what economists call the zero lower bound—and could impose significant negative interest rates.

Digital legal tender isn't without risk. A policy that drives down the value of paper money would meet political resistance and—to put it mildly—require some explaining. It could hold

back private innovation in digital currencies. Security will be an abiding concern. Noncash payments also tend to exacerbate the human propensity to overspend. And you don't have to be paranoid to worry about Big Brother tracking your financial life.

Governments must be alert to these problems, because the key to getting people to adopt such a system is trust. A rule that a person's transaction history could be accessed only with a court order, for instance, might alleviate privacy concerns. Harmonizing international regulations could encourage companies to keep experimenting. And an effective campaign to explain the new tender would be indispensable.

If policymakers are wise and attend to all that, they just might convince the public of a surprising truth about cash: We're better off without it.

A Nuclear Weapon The U.S. Doesn't Need

**Nuclear cruise missiles don't make strategic
sense and won't increase the country's security**

For a president who famously advocated a world without nuclear weapons, Barack Obama has done a lot to keep the U.S. nuclear arsenal intact. That's not a criticism—it was his promise that was naive, not his policy—but in one respect, his strategy is unnecessarily destabilizing.

The administration's proposal to spend as much as \$30 billion to create a new nuclear cruise missile to be carried by the aging B-52 bomber—part of the natural inclination of the military to trade up—makes no sense financially or strategically. Cruise missiles, which are smaller than land-based intercontinental ballistic missiles and fly farther than tactical bombs dropped by planes, are the wild card of the nuclear arsenal: Unlike ICBMs, they're very hard to spot by radar or satellite, and, even if detected, they're indistinguishable from conventionally armed cruise missiles.

This is a problem, because a successful deterrence strategy requires that both sides in a potential nuclear conflict have a pretty good idea of what the other would do. Even the cold warrior Ronald Reagan subscribed to this theory of deterrence, agreeing with the Soviets in 1987 to eliminate land-based nuclear cruise missiles. His successor, George H.W. Bush, ordered them taken off U.S. submarines. The only current version is carried by the B-52, which is too slow and easily spotted to enter contested airspace and drop bombs. William Perry, the former defense secretary who oversaw the development of air-launched cruise missiles, now supports a global ban on nuclear-tipped cruises.

America's nuclear arsenal remains a linchpin not only of national defense but also of international security, and Obama's support of hundreds of billions of dollars to modernize it is justified. But plans to upgrade the nuclear cruise missile won't make the U.S., or the world, any safer. **B**



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How Mosquitoes Can Bleed an Economy

► Based on damage from malaria and dengue, the spread of Zika will prove costly

► “It’s a fight against an almost invisible enemy”

The *Aedes aegypti* mosquito weighs less than a grain of rice, lives only a few weeks, and doesn’t stray more than 100 yards from where it hatches. For a creature of such limited scope, it has an outsized influence on human health and global commerce. In 1793 a mosquito-carried epidemic of yellow fever in Philadelphia shut down trade and killed a 10th of the city’s residents. A century later, the same disease foiled France’s effort to build a canal across Panama.

Aedes aegypti is now spreading the Zika virus through Latin America. The virus, detected in Brazil for the first time last May, is suspected of causing

an increase in babies born with abnormally small heads, a serious birth defect known as microcephaly. With no vaccine or cure for Zika, “the most effective protective measures are the control of mosquito populations and the prevention of mosquito bites,” Margaret Chan, director-general of the World Health Organization, told reporters on Feb. 1. Officials in Texas on Feb. 2 identified a case of sexual transmission of the disease.

“Mosquito-borne diseases are among the most preventable and yet the most expensive,” says Lawrence Gostin, a professor of global health

law at Georgetown Law. He estimates that the costs of responding to the Zika epidemic will reach “well into the billions,” counting money spent on a vaccine. The pattern of other mosquito-borne illnesses suggests Zika will be costly in a variety of ways. The number of years lost due to ill health, disability, or early death, “not to mention the huge cost to health-care systems, is very substantial,” says Stephen Higgs, president of the American Society of Tropical Medicine & Hygiene and the director of the Biosecurity Research Institute at Kansas State University.

12

Brazil Fights Back

The Zika outbreak is centered in Brazil’s northeast. Despite a recession, the nation plans to spend

\$257m

on mosquito control this year.



Rio de Janeiro

Carnival revelers call for preventive measures

The WHO estimates there could be 3 million to 4 million cases of Zika in the Americas this year. In Brazil, President Dilma Rousseff's administration has warned pregnant foreigners against traveling to Rio for the Olympics in August. Pregnant women across Brazil are scouring pharmacies for bug repellent. Many are canceling trips to northeast Brazil, the outbreak's epicenter.

In the middle of its worst recession on record, Brazil will spend more than 1 billion reais (\$256.7 million) on mosquito eradication in 2016. It's mobilizing 220,000 soldiers and 309,000 health workers to go door to door, checking for standing water and distributing pamphlets on mosquito prevention. Workers have visited almost 11 million homes so far in an awareness campaign that Rousseff's chief of staff, Jaques Wagner, called "our only vaccine" for now. "It's a fight against an almost invisible enemy that spreads quickly," he said after an emergency cabinet meeting. Wagner said the chance of canceling the Olympics "doesn't exist."

Brazilian authorities are likely "hoping against hope that people don't

stay away" from the Olympics, says Grant Hill-Cawthorne, a medical virologist who teaches public health at the University of Sydney. In past outbreaks such as the SARS virus in Asia in 2003, the economic costs of disruptions to travel and commerce outweighed the direct medical costs of the disease.

"We know from West Africa with the Ebola outbreak that it can hit economies hard," Hill-Cawthorne says.

Dengue is also spread by *Aedes aegypti*, which breeds in standing water, bites during the day, and thrives in cities in the tropics. Symptoms normally consist of flu-like pains and fever. But in the worst cases, dengue hemorrhagic fever can lead to circulatory system failure. The number of reported cases of dengue each year has jumped from about 125,000 in the 1970s to more than 3 million in 2013. By some estimates 390 million people get infected each year, though not all will develop symptoms. More than 2 billion people live in places that

put them at risk for dengue.

Dengue costs the world about \$9 billion a year, says Donald Shepard, a health economist at Brandeis University. That counts the cost of treatment and the value of time lost to illness and death. It includes spending on surveillance and prevention and reductions in trade and travel. Most of the costs fall to "countries that can very ill-afford that kind of burden," Shepard says, noting that Brazil has the most dengue cases in the world.

By far the greatest damage is inflicted by malaria, transmitted by the *Anopheles* mosquito. In the U.S., the predecessor to the Centers for Disease Control and Prevention was founded during World War II to fight malaria in the Southeast. "It wasn't that long ago when malaria was a terrible economic drag ▶

São Paulo



Spraying pesticide fog in a residential neighborhood

A Brazilian soldier conducts a street inspection



Recife

Mosquito-Borne
Diseases

At-risk population

3.4b

2.5b

1.2b

New cases per year

214m

100m

120m*

Deaths per year

483k

13k

Rarely fatal

Vaccine

No

Yes

No

Therapy

Yes

No

Yes

Carrier mosquitoes

*Anopheles**Aedes aegypti*,
*Aedes albopictus**Culex*, *Anopheles*,
Aedes

*CASES AT ANY GIVEN TIME; DATA: WORLD HEALTH ORGANIZATION, DONALD SHEPARD, CENTERS FOR DISEASE CONTROL

on development” in the U.S., says Mark Honigsbaum, a medical historian at Queen Mary University of London.

Columbia University economist Jeffrey Sachs observed in 2001 that countries with severe malaria had lower economic growth while those that reduced malaria grew faster. *Anopheles* bites at night; spraying walls and installing insecticide-treated bed nets can stop them. A concerted global campaign against malaria supported by the Bill & Melinda Gates Foundation has helped drive down the death rate by 60 percent since 2000. The world spent \$2.7 billion treating and fighting malaria in 2013.

In Nigeria, one of the countries most affected by malaria, the Zika virus raises fears of a new mosquito-borne threat. “I don’t want that sickness to come to Nigeria,” says Christina Richards, a cleaner in Lagos who is 24 weeks pregnant. “Nigeria cannot handle it if it comes.” The country has become complacent about malaria, says Chikwe Ihekweazu, an infectious disease epidemiologist and editor of *Nigeria Health Watch*. “That message of protecting ourselves from getting bitten has been hammered in the public health space for years, but we have a laissez-faire attitude toward malaria,” he says. “We all think, OK, we all get malaria, we’ll all get better.”

There were 214 million malaria cases globally in 2015 and 438,000 deaths, compared with about 13,000 from dengue. Eliminating malaria by 2040 would cost \$90 billion to \$120 billion and yield \$2 trillion in benefits from health and productivity gains, according to a report from the Gates Foundation and the nonprofit Malaria No More. The plan is to deploy a vaccine and eliminate *Anopheles*.

While the world has shrunk malaria’s footprint in Asia and Africa, flare-ups

of diseases such as dengue, Zika, and chikungunya (similar to dengue) in the Americas pose a different sort of challenge. First identified in Uganda in 1947, Zika spread fast across Latin America because the population had never seen it before, so no one had immunity. “Pathogens that used to be confined to particular ecological niches, now they can get out of those niches” on ships and planes, says Queen Mary University’s Honigsbaum. “And when they do, you can’t predict where they’re going to turn up.”

“You’re always going to be behind the curve on the vaccine side or the human treatment side,” says Grayson Brown, director of the Public Health Entomology Laboratory at the University of Kentucky. “The only thing we can do to protect ourselves is to upgrade our ability to manage mosquitoes.” —John Tozzi, Jason Gale, Anna Edgerton, and Yinka Ibukun

The bottom line Responding to the Zika epidemic, the latest mosquito-borne illness to catch the world by surprise, could cost billions of dollars.

Petro-Diplomacy

A Saudi-Russian Oil
Détente? Not Likely

► Moscow’s call for talks went nowhere, but oil prices jumped

► “Russia has zero credibility with OPEC and with Saudi Arabia”

Most oil analysts and traders were intrigued when Russia’s energy minister signaled on Jan. 28 that the Kremlin wanted to discuss oil production cuts with OPEC. After all, limiting supply may help bolster the collapsing price of

crude, which is hurting all major petro-power powers. Yet no one was surprised when the Saudis didn’t jump at the chance to meet with the Russians.

The Saudis have insisted that OPEC won’t cut output unless other major exporters like Russia, the world’s top producer, reduce output as well. “Russia has zero credibility with OPEC and with Saudi Arabia in particular,” after promising cuts during previous crises and then failing to deliver, says Citigroup analyst Seth Kleinman. Russia pledged to curb output when oil crashed in 2001 but instead increased its crude exports while Saudi Arabia cut back. The Russians did the same in 2008, leaving OPEC to shoulder the burden of output reductions.

A Saudi-Russian agreement also would require more than economic calculation. President Vladimir Putin

“It raises the question of whether this is just being done in a desperate attempt to prop up the oil price.”

—Citigroup analyst Seth Kleinman

supports Syrian ruler Bashar Al-Assad, while the House of Saud backs rebels seeking his overthrow. And if the Saudis cut their production, they’d be providing an opening for Iran, an Assad ally. Iran has been ramping up crude exports after sanctions

were lifted last month.

A deal is not only “highly unlikely,” in the estimation of Goldman Sachs, but “self-defeating” for the Saudis. By cutting production now and boosting prices, Saudi Arabia would effectively bail out U.S. shale producers just as the Saudi strategy of keeping prices low to squeeze them out of the market is beginning to work, Goldman’s Jeff Currie argues. Shale will buckle if the Saudis stay the course: The

International Energy Agency predicts that non-OPEC production will slump this year by the most since 1992.

Citigroup’s Kleinman suggests that setting up an actual conference may no longer be the point. Russia has always said it can’t easily cut production for technical reasons—restarting oil wells is a lot harder in frozen Siberia than in the Arabian desert. Russian oil companies prefer to keep pumping at full throttle. The country’s publicly listed companies are less willing to curb supply than the state-owned champions of the Persian Gulf. Leaving the “heavy lifting” to OPEC has usually

paid off for the Kremlin, Kleinman says.

So why even float the idea of rapprochement? The Russian announcement, plus rumors among traders of what Kleinman calls a “mythical agreement” between Russia and Saudi Arabia, pushed oil prices up 20 percent from their late January lows. Planting the possibility of an end to the oil war in traders’ minds could be an end in itself. “It raises the question of whether this is just being done in a desperate attempt to prop up the oil price,” Kleinman says. “It also raises the question of how long that strategy is going to work. Talk is cheap.”

Financially strapped Venezuela, an OPEC member, continues to push for production cuts. A Venezuelan report on Feb. 3 said six OPEC members, including Iran, and two non-OPEC countries, including Russia had agreed to meet later this month. Without Saudi support, they’re unlikely to agree to anything meaningful. —Grant Smith

The bottom line A possible pact to cut output by Russia and Saudi Arabia collapsed even before talks were set.

Takeovers

China’s Little-Known Big Dealmaker

► Ren Jianxin’s pursuit of Switzerland’s Syngenta pays off

► “We need an improved version of the Chinese company”

Ren Jianxin doesn’t have the name recognition of Chinese billionaires such as Jack Ma of Alibaba Group or Wang Jianlin of Dalian Wanda Group. But the chairman of state-owned **China National Chemical** (ChemChina) has just engineered an \$46 billion international acquisition, China’s biggest to date.

Ren has offered to buy **Syngenta**, a Swiss pesticide and seed company whose board has recommended the deal, expected to close by yearend. The acquisition of Syngenta caps months of off-and-on negotiations that included Ren being rebuffed after offering 449 Swiss francs (\$446) a share, valuing the company at

\$42 billion. His final offer is equivalent to 480 francs a share—in cash. The deal still has to be cleared by regulators in the U.S. and Europe.

Ren, after orchestrating more than 100 mergers and acquisitions in China and abroad, “thinks something needs to be changed in order for Chinese-style companies to be sustainable,” says Pang Guanglian, deputy secretary general of the China Petroleum and Chemical Industry Federation, who’s attended industry meetings with him. “That change comes from acquiring Western brands.”

While Ren has been a member of China’s Communist Party throughout his career, he’s a different sort of state-owned enterprise leader. He aggressively pursues overseas assets, glad-hands foreign executives, and airs doubts about the efficiency of state companies. On ChemChina’s 10th anniversary in 2014, he wrote in a company newsletter: “For an improved version of the Chinese economy, we need an improved version of the Chinese company.”

ChemChina bills itself as China’s largest chemical company, with assets of 292.3 billion yuan (\$44.4 billion) as of Sept. 30 and facilities in more than 140 countries. The conglomerate refines oil, makes pesticides and animal feed, and develops products such as the radiation-resistant Chinese flag carried by the Yutu moon rover. Ren refused to comment for this story.

Despite his talk of improving Chinese companies, Ren’s enterprise in some ways doesn’t appear to be much different from many SOEs that borrow huge sums from state-owned banks to keep going. For the quarter ended Sept. 30, ChemChina carried total debt of 156.5 billion yuan, or more than five times its cash and equivalents. The company had a negative return on assets and a net loss of 889.3 million yuan in the third quarter.

The SOE “sector as a whole, it’s highly leveraged,” says Arthur Kroeber, managing director at Gavekal Dragonomics, a Hong Kong-based research firm. “That’s bad news for the economy. But it’s not really clear that the government is thinking that way. They’re still thinking in terms of, ‘It’s good for companies to gain access to these technologies and these distribution channels.’”

ChemChina’s shopping spree fits with President Xi Jinping’s vision of SOEs buying companies that will help China produce higher-value goods.

And, despite the worrisome stock market news and capital flight, China’s banks—which have 193 trillion yuan in assets—are still willing to finance the ambitious plans of SOEs. In ChemChina’s case, that strategy would help build foreign revenues as growth in China’s economy slows.

Syngenta’s seed technology will also improve food security for a nation where

corn yields are about half of those in the U.S. and the amount of arable land is declining. ChemChina will gain a worldwide presence in insecticides and crop development as well.

The Syngenta deal tops off a decade of mergers and acquisitions by ChemChina targeting domestic companies, French and Norwegian chemical makers, and an Israeli agrochemicals company. Last year, ChemChina’s tire and rubber subsidiary bought control of Pirelli, the tiremaker for Ferrari, Bentley Motors, and Formula One race cars, for \$8 billion. Ren has announced more than \$15 billion worth of deals since 2005, excluding Syngenta, according to data compiled by Bloomberg.

He may be a global dealmaker but Ren, a 58-year-old with rimless glasses, thick dark hair, and a soft chin, remains a mystery at home. At the



Ren Jianxin

Skills School vs. Scores

There's a long-running debate over what matters more—formal learning or learning on the job. On math tests, American teens perform worse than Danes, Latvians, and Koreans. But how much does that matter?

“Education is not a panacea.”

So argues Joseph Stiglitz, a Nobel-winning economist at Columbia. He says societies need to emphasize lifelong learning, not just school.

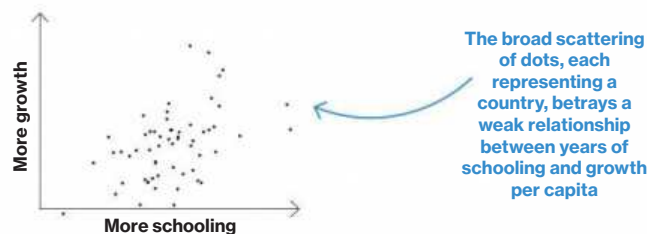
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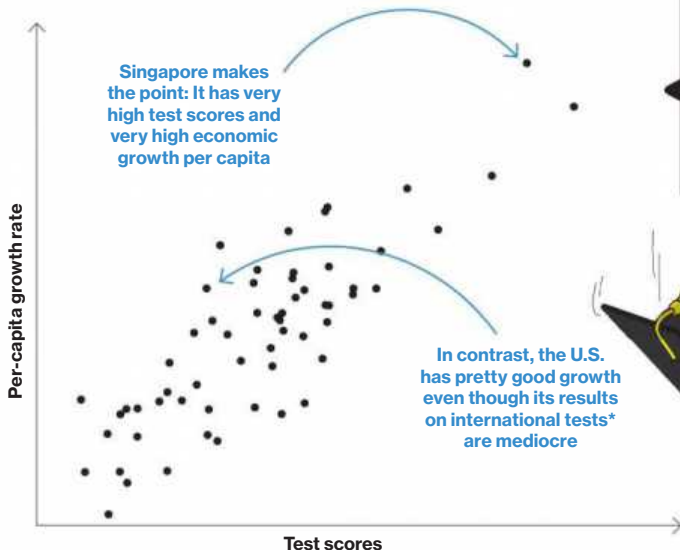
Among 34 countries in the Organisation for Economic Co-operation and Development, the U.S. was **27th** in math and 20th in science in 2012



An article in the Jan. 22 issue of the journal *Science* finds that formal education does lift growth—as long as students really learn something. The mistake is to focus on years of schooling.



Here's where you see the payoff from school:



“I am worried, personally, that we're going to have to rely on the skills of our people in the future.”
—Eric Hanushek, Hoover Institution, co-author of the *Science* article



◀ World Economic Forum in Davos, the president of the Beijing-based Asian Infrastructure Investment Bank, Jin Lique, said he didn't know him. Neither did Xu Jinghong, chairman of Tsinghua Holdings, the investment fund of Beijing's Tsinghua University. Pang, of the chemical federation, says some Chinese consider it “odd” that Ren gets along so well with foreign executives. “This is quite unconventional for a head of a central SOE.”

In the world of state-run companies, where nondescript men wearing short-sleeved white shirts and baggy windbreakers are the norm, Ren is known to flash cuff links on a pin-striped sleeve. “Most of our employees are Chinese, but you can also see there has been a substantial influence from foreign management,” says Michael Koenig, a former Bayer executive who became chief executive officer of an important ChemChina subsidiary in January. “Compared to what I know from other Chinese SOEs, we are more open, more international.”

Ren began his ascent in northwest Gansu province, a poor mining region next to the Gobi desert. He graduated from the economics department of a local university—eventually earning a master's degree—and joined the state-run Chemical Machinery Research Institute, where he was the Communist Youth League secretary. It was a recipe for a do-nothing bureaucratic career.

In 1984, Ren borrowed 10,000 yuan (about \$1,500 at current exchange rates) from the institute to start the BlueStar Chemical Cleaning Group. His first employees scrubbed tea kettles as Ren took the most reliable path to power in China and became BlueStar's Communist Party secretary, according to his biography. He made an important ally: a woman named Gu Xiulian who was the formidable head of the chemical industry ministry from 1989 to 1998. She was also on the Communist Party's powerful central committee for 20 years. Ren transformed BlueStar from a scrubbing operation into ChemChina, a nationwide conglomerate of hundreds of chemical companies. Gu declined to comment.

Ren's perspective on potential problems may be gleaned from a ChemChina newsletter. It reviewed

*THE TESTS INCLUDE THOSE DEVELOPED BY THE PROGRAM FOR INTERNATIONAL STUDENT ASSESSMENT AND TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY; DATA: ERIC HANUSHEK, LUDGER WOESSMANN, HOOVER INSTITUTION, IFO INSTITUTE

the Pirelli deal by saying, “Economists expect the merger to have a 25 percent chance of success and a 75 percent chance of failure.” Not to worry, it continued, everything will work out.

—Sarah Chen and Tom Lasseter

The bottom line Ren Jianxin, chairman of ChemChina, adheres to Xi Jinping’s strategy of acquiring technology and access to new markets.

Commodities

The Bakken Bust Hits North Dakota Hard

► Oil and gas went from 2 percent of the economy to 16 percent

► “We never would have guessed it would get down to \$28 a barrel”

For most of the past decade, North Dakota has been the economic envy of every state in America. It posted the lowest jobless rate, the highest increase in personal income, and the fastest-growing population—all thanks to an historic oil boom that vaulted it past Alaska to become the country’s second-largest producer after Texas. Now, amid the worst bust in a generation, North Dakota’s economy is shrinking, employment is falling fast, and the state is imposing the deepest spending cuts in its history to help plug a \$1 billion budget deficit. “Quite simply, the North Dakota economy has been devastated by the dramatic drop in oil prices,” says Karl Kuykendall, an economist at the market research and energy consulting firm IHS.

With crude prices at 13-year lows, Republican Governor Jack Dalrymple on Feb. 1 ordered 73 state agencies to make 4 percent across-the-board cuts. Patching the deficit, which comes after years of surpluses, will require officials to take \$500 million out of a rainy-day fund, leaving it with only \$75 million for emergencies. Dalrymple is only the third governor in the state’s 127-year history to dip into the fund.

When state officials were drafting their budget a year ago, they assumed oil prices would range from \$47 to \$53 a barrel, which they thought was sufficiently pessimistic to cover them against further drops. They were not

pessimistic enough. “We never would have guessed it would get down to \$28 a barrel,” says Pam Sharp, the state’s budget director.

Despite the severe drop in prices, North Dakota’s oil production has held up remarkably well, falling to 1.17 million barrels a day in November from a peak of 1.23 million in December 2014, in part because drillers have been able to reduce the amount of money it costs to produce each barrel.

Taxes on oil production account for only about 5 percent of total state revenue, says David Flynn, chair of the economics and finance department at the University of North Dakota. The real money comes from sales tax revenue, the bulk of which is derived from the sale of equipment and services related to fracking, says Sharp. With prices down, roughly 1,000 wells that have been drilled but not fracked are sitting idle, awaiting the market’s recovery. As a result, the state’s sales tax revenue fell by a fourth during the third quarter of 2015 from the same period in 2014. “Sales tax revenue alone is down \$700 million from the original forecast,” says Sharp.

According to data from the Bureau of Economic Analysis, North Dakota’s economy shrank 10.4 percent in the first quarter of 2015 and 1.2 percent

during the second quarter. In 2004 oil and gas activity represented about 2 percent of the state’s economy. By 2014, it was almost 16 percent, according to IHS’s Kuykendall.

Alaska, Texas, Louisiana, and Oklahoma are also reeling from stagnant commodity prices, with lower-than-expected job and economic growth. In Alaska, Governor Bill Walker is proposing six separate tax increases on economic bulwarks such as energy, fisheries, and tourism, as well as the state’s first income tax in more than 30 years, to close a record \$3.5 billion deficit.

For some North Dakota residents, the bust comes as both a blessing and a curse. Jennifer Strange, who lives in Killdeer in the heart of the Bakken, laments that her favorite coffee shop has recently closed. But the roads are better and no longer nearly as crowded. “So much oil money went to road improvements. That’s definitely a quality-of-life improvement that will last beyond the boom.”

—Jennifer Oldham and Matthew Philips

The bottom line North Dakota has been losing jobs fast since the oil bust hit, leaving 1,000 wells idle and creating a \$1 billion budget shortfall.



It's a buyer's market in Dickinson, N.D.

February 8 — February 14, 2016

Dabbawalas
in Mumbai



You Won't Find GrubHub Here

► In India, venture capital-backed food apps haven't replaced traditional *dabbawalas* on bikes

► “They forgot that they needed to make money to survive”

More than 400 food delivery apps started up in India over the past three years, raising \$120 million from venture capital firms and other investors. Luring customers with photos of tasty curries along with discounts and free delivery, they sought to disrupt the delivery networks that have existed in India since the 1890s, including Mumbai's famously low-tech *dabbawalas*, who ferry 175,000 meals—some from cooks' homes, others from central kitchens—to office workers and students daily. The time-tested deliverymen carry boxes via trains, bicycles, and pushcarts to their hungry clients, using a system of alphanumeric codes printed on reusable containers.

The new services offered something *dabbawalas* don't: last-minute ordering and the ability to choose dishes from hundreds of restaurants. *Dabbawalas* require a monthly commitment, and customers are locked into a meal plan for the entire period. Even so, most of

the high-tech startups have foundered, and dozens have closed. The ones that are surviving, including **TinyOwl** and **Foodpanda Hellofood's** India unit, are shrunken versions of their former selves. “The story was glorious when they had lots of money in the bank, but they went madly after customer growth and spent it quickly,” says Anil Joshi, an investor and founder of Unicorn India Ventures in Mumbai, who didn't invest in food delivery companies.

Meanwhile, the *dabbawalas* appear to be busier than ever. While they have no apps, they've managed to retain market share. And they're jumping on the e-commerce bandwagon themselves—by lending delivery staff to companies such as giant e-tailer **Flipkart** and offering training programs for new tech-enabled merchandise delivery startups such as **Roadrunner**.

“All these people got into the business and offered services for very

cheap, but they forgot that they needed to make money to survive,” says Subodh Sangle, a coordinator with the Mumbai Tiffin Box Suppliers Association, a union representing about 5,000 lunchbox deliverymen. “We have been working in this field for so many years and know what it takes to deliver meals at the right price.”

The experience of TinyOwl is telling. The

Labeled
lunch
containers



Number of meals delivered to office workers daily

175k

Mumbai-based platform to order food from nearby restaurants started in 2014 and raised about \$20 million in its first year. Its workforce grew to about 1,200 in early 2015, and co-founder and Chief Executive Officer Harshvardhan Mandad said he planned to expand operations to 50 cities by the end of that year. By November the company had let go of 270 workers, mostly call-center employees and delivery personnel. When one of the co-founders arrived to break the news at the company's office in Pune, a city near Mumbai, he was taken hostage by angry employees who demanded immediate payment of severance packages, technology news site *MediaNama* reported. Police were called in to rescue the executive, the report said. He didn't respond to calls and text messages seeking comment. The company now operates in just two cities, with about 200 employees.

TinyOwl's biggest rival was Foodpanda, a restaurant delivery provider owned by Germany's Rocket Internet. With operations in more than 25 nations, it entered New Delhi in 2012 and rapidly expanded to more than 30 cities across India, with a workforce swelling to 1,300 by late last year. While the company spent heavily on TV ads and discounts to woo consumers, its operations were plagued with poor technology, accounts of swindling by fake restaurants, and theft by employees and contractors, the *Mint* newspaper reported in September.

"The challenges on the ground are far bigger than anyone can imagine," Foodpanda India CEO Saurabh Kochhar said in an e-mail.

"We face issues from mindset to infrastructure to capabilities." He said the company dismissed 15 percent of its workforce as part of its move to automate operations. Local media reports said layoffs were more than double that percentage. Kochhar declined to comment on

the company's investigation into the fraud allegations.

The company has weeded out fraudulent restaurants and converted its system to a "very, very tightly managed marketplace," says Ralf Wenzel, global CEO for Berlin-based Foodpanda. "In other countries, you could have been much more open. But not in India." Still, the India business is "better than ever," he says, denying local media reports the unit is for sale.

Part of the problem is that the companies expanded too quickly, hiring scores of delivery personnel and call-center employees. That's led to a "quasi-crisis kind of situation" as salaries for delivery staff have risen almost 70 percent in the past year, says Rituparna Chakraborty, senior vice president at recruitment consultant TeamLease. Upstarts including **Swiggy** have skipped hiring delivery staff altogether, instead recruiting part-timers for each delivery.

Even seasoned players have struggled to make food ordering work. Seven-year-old, **Sequoia Capital**-funded **Zomato Media** is India's biggest aggregator of restaurant menus. It got into food delivery last May, along with a new cashless payment service. But in November it fired about 300 people, 10 percent of its staff, and ditched the cashless service.

The company said in a blog post that it had overspent on the program, including handing out free iPads to thousands of restaurants. In December it said it was shutting down online ordering in 4 of 14 cities where it operates. "Despite Zomato's recent marketing efforts, including television ads, it didn't see a significant increase in the order volumes in these few cities," co-founder Pankaj Chaddah said in a statement.

For restaurateurs such as Rajiv Rambhia, who runs the Local Bites restaurant in Mumbai, the flush of food-ordering apps has been a mixed experience. There was the initial boom when TinyOwl, Foodpanda, and others lured lots of customers by offering discounts of as much as 50 percent. Then the discounts started drying up, and the

app companies started charging restaurants commissions of as much as a fifth of each order. "Obviously, if you offer them a 50 percent discount, people will come," Rambhia says. "When the offer stops, those orders also stop. My business hasn't really gone up because of these guys." —*Adi Narayan*

The bottom line Food delivery apps in India raised \$120 million from investors in the past three years but failed to displace traditional meal deliverymen.

Aerospace

Can Bombardier Fly With the Big Boys?

► The regional jet maker is having trouble selling bigger planes

► With thousands of jobs at stake, "for Quebec, it's too big to fail"

Pierre Beaudoin was just 40 days into his job as chief executive officer of **Bombardier** in 2008 when he approved its biggest undertaking ever—a family of transcontinental jets that would compete directly with aircraft from giants **Boeing** and **Airbus**. Beaudoin was so confident his fuel-efficient, 108- to 160-seat C Series planes would be a hit, he refused to offer large-volume discounts to win big potential customers like **American Airlines** or **United Airlines** for the plane's launch.

"Yes, it costs more money, but we have an exceptional aircraft," Beaudoin told analysts last year.

Exceptional may not be good enough. The C Series' first delivery is two years behind schedule and \$2 billion over budget, while orders have stalled. That's left Bombardier burning cash, sent its shares into penny stock territory, and forced the company to seek as much as \$1 billion in Canadian government aid to stay afloat.

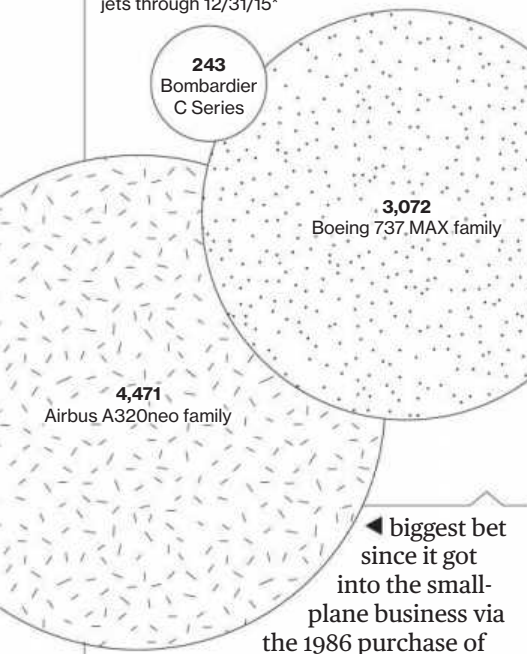
With an initial budget of \$3.3 billion, the C Series was Bombardier's

A flawed initial strategy "excluded them going after a massive customer with a large order that would have given them the credibility they needed." —*Ernie Arvai, AirInsight*



Low Flyer

Orders of fuel-efficient medium-range commercial jets through 12/31/15*



Canadair from Canada's government. The C Series, made from lightweight composite parts, promised to consume 20 percent less fuel than rivals' airplanes, cutting operating costs by 15 percent. It also represented a shift upmarket for Bombardier, which had previously competed primarily against Brazilian regional jet maker **Embraer**.

Some former executives say there were internal disagreements over how to manage the transformation. Gary Scott, who oversaw the launch of the C Series as Bombardier's commercial aircraft president until his departure in 2011, says it was crucial early on to get some big-name airlines or low-cost carriers on its order book to show momentum. He likens it to taking precise "rifle shots" at key airline targets. But he says that when the sales team argued that Bombardier needed to be more competitive on price and service, upper management disagreed, saying the C Series was worth a premium. Another former executive says the disputed price gap was often as little as \$2 million on a plane that lists for as much as \$82 million.

"When we looked at what it was going to take to make a few more rifle shots," Scott says, "the company wasn't willing at that point, and apparently since." Beaudoin, now Bombardier's executive chairman, declined to comment.

Another misstep may have been casting too wide a net for early sales, some former employees say. In a 2012 interview, Chet Fuller, then Bombardier's chief commercial salesman, vowed to secure 40 different customers on all continents. "That initial strategy of building a geographically dispersed customer base excluded them going after a massive customer with a large order that would have given them the credibility they needed," says Ernie Arvai, a partner at consultant AirInsight. "To me that was their big failure."

Making matters worse, development of the C Series began at the start of the financial crisis, and just as the planes are nearing delivery this year, oil prices have tumbled—reducing the appeal of fuel-efficient aircraft.

Bombardier has won only 243 orders for the jet—none in the last 16 months. Of the 14 customers for the plane as of late January, only two—**Deutsche Lufthansa** and **Korean Air Lines**—rank among the world's biggest carriers. By contrast, Airbus had 4,471 orders at the end of December for its fuel-efficient A320neo jet, which got under way two years later than the C Series.

Still, Bombardier may get a receptive ear from Canada's government. The Montreal-based company employs 17,750 people in Quebec and contributes C\$6.5 billion (\$4.7 billion) annually to the province's economy; Quebec's government has already pledged \$1 billion in aid. "Bombardier is viewed like a big American bank—for Quebec, it's too big to fail," Arvai says. And the company represents the kind of value-added manufacturing the new government of Prime Minister Justin Trudeau wants to promote as Canada tries to diversify its resource-based economy.

Any Canadian federal cash injection would buy Bombardier time while several carriers, including **Delta Air Lines** and United, consider new aircraft orders. "At the right price, it is quite a competitive airplane," Delta CEO Richard Anderson told analysts in January. "We are taking a very serious look

at it." Bombardier certainly seems to be listening: Fred Cromer, the company's current president for commercial aircraft, indicated in December that it would become more aggressive on price to win big orders. —*Scott Deveau and Frederic Tomesco*

The bottom line Bombardier's C Series family of larger jets is two years late and \$2 billion over budget, straining the company's finances.

Marketing

Under Armour's Most Valuable Players

► **Bets on young, unproven athletes are paying off**

► **It's "like buying Apple before they announced the iPhone"**

When **Under Armour** re-signed an endorsement deal with NFL quarterback Cam Newton of the Carolina Panthers before the current season, it looked like a risky investment. The former Heisman Trophy winner wasn't considered a top NFL player. As he heads into the Super Bowl on Feb. 7, Newton is the favorite for the league's MVP, according to odds-makers who also have the Panthers winning the game. "Investing in Cam Newton before this season is like buying Apple before they announced the iPhone," says Scott Becher, managing director of Z Sports & Entertainment, an advertising agency.

Under Armour's roster now boasts three of the best players and biggest stars in the NFL, the NBA, and MLB: Newton, Stephen Curry of the Golden State Warriors, and Washington Nationals right fielder Bryce Harper. Like Newton, Curry wasn't a sure thing. The company picked him up after **Nike** decided not to re-sign him in 2013 in part because he was injury-prone. Now he's pro basketball's reigning MVP.

The company's eye



for talent isn't confined to team sports. Under Armour signed golfer Jordan Spieth, a relative unknown, right after he turned pro in 2013. Now he's the No. 1-ranked player in the world.

At about an eighth the size of Nike, the largest sports company in the world, Under Armour can't spend as lavishly on athletes as its larger competitor. Instead, it bets on young athletes with promise, hoping they become superstars down the road. "We look for maturity, mental toughness, and desire to be great—those things comes first—and then the talent," says Ryan Kuehl, Under Armour's vice president for sports marketing and a former NFL lineman.

Of course, Nike signs kids, too—but it can afford to gamble on a lot more of them. "There's some good fortune there, but they've done their homework," Matt Delzell, managing director of ad agency the Marketing Arm, says of Under Armour. "It's very difficult to compete with Nike, but if you are, you have to be very smart."

Under Armour has also looked beyond sports. In 2014 the company struck deals with ballerina Misty Copeland and supermodel Gisele Bündchen. In January, actor Dwayne "The Rock" Johnson became the latest celebrity to work with the company. "They've been disruptive, and this is another example," says Matt Powell, an analyst at research firm NPD Group.

Under Armour has maintained robust growth. Sales grew 29 percent in 2015, to \$4 billion, helped by a line of \$130 Curry sneakers that quickly sold out. "Newton's success is great for the brand, but it's not a catalyst for sales the way Curry and Spieth are," says Chen Grazutis, an apparel and footwear analyst for Bloomberg Intelligence. It's easier to design casual wear off of golf and basketball, he says. "Spieth looked great in a blue UA shirt when he won the 2015 Masters," Grazutis says—so good that the shirt sold out a few days later. —*Matthew Townsend, with Scott Soshnick*

The bottom line Smart endorsement deals and luck have landed Under Armour three of the top players in the NFL, the NBA, and MLB.

Briefs

By Kyle Stock

No Cheers at Yahoo!

✂️ **Yahoo!** said it's trimming 15 percent of its workforce and exploring a sale of its long-struggling Web properties as CEO Marissa Mayer's efforts to spur growth continue to flounder. The company also took a charge of \$4.5 billion as it wrote down the value of some of its brands, including the Tumblr blogging platform. Several private equity firms and **Verizon Communications** said they would consider a deal. 📺 **Comcast** added 89,000 cable customers in its most recent quarter, its

biggest TV boost in eight years. The video giant won the business by improving customer service and offering smaller bundles of channels. 🚗 **Toyota** idled Scion, a sputtering brand

intended to appeal to young drivers in the U.S. By September, remaining Scion cars will be sold as Toyotas. Launched in 2003, the brand saw sales peak three years later with 173,000 cars. Last year just 56,200 Scions rolled off lots.

📺 **Sumner Redstone**, 92, resigned as chairman of **CBS** effective Feb. 2, the media company announced. The ailing mogul will be replaced by Les Moonves, who will remain president and CEO. Redstone's daughter, Shari Redstone,

remains vice chairman. 🍌 A rash of food-poisoning incidents also sickened **Chipotle Mexican Grill's** finances, as the chain said sales at established restaurants slumped almost 15 percent in the recent quarter. Costs increased, too. As Chipotle beefed up pathogen screening and employee training, the operating margin for its average restaurant fell from 26 percent to 19.6 percent.



Tesla filed for a dealership license in Michigan. Currently, Tesla only operates showrooms, and customers have to order cars online.

Alphabet's market value. The corporation formerly known as Google became the world's most valuable company, passing Apple, when its shares surged to almost \$790 each on Feb. 2.

\$547
billion

CEO Wisdom

"I have two daughters. They're both technically very bright. I want them to come into a workplace that's a better place than the way the workplace is today."

—**Intel CEO Brian Krzanich**, on his company's bid to boost diversity among engineers



B Edited by James E. Ellis and Dimitra Kessenides
Bloomberg.com

Sundance Film Festival 2016

Sundance Institute is proud to acknowledge and thank its 2016 Sundance Film Festival supporters. Their generosity reflects a shared commitment to sustaining the vitality of independent film, filmmakers and audiences at the Festival and year-round.

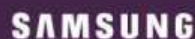
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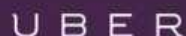
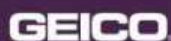
Host State



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The Other Race in New Hampshire

► Republicans need Senator Kelly Ayotte to keep her seat, no matter who wins the nomination

► “It’s just easy to paint a picture that she’s one of them, of that extreme right wing”

New Hampshirites take their role as the first voters in any presidential primary very, very seriously. At a party sponsored by the state GOP to watch the Jan. 28 Republican debate, attendees marked the 100th anniversary of New Hampshire’s primary with a red, white, and blue sheet cake emblazoned with the words “Celebrating FITN”—Twitter parlance for “first in the nation.” Campaign volunteers, party officials, and politicians snacked on brie-and-raspberry phyllo triangles while local surrogates made pitches for their candidates.

They also had their pick of free buttons, signs, and bumper stickers for Kelly Ayotte, the state’s first-term U.S. senator, who is running for reelection in November. In 2010, amid a national Republican wave, she beat her Democratic opponent by 23 points, even as New Hampshire reelected Democrat John Lynch to the governor’s mansion. This year, Ayotte, a fiscal conservative who has reached across party lines to cooperate with Democrats, is crucial to the GOP’s hope of holding on to its four-person Senate majority.

“I like her very much,” said Raul Cervantes, a regular volunteer for Republican campaigns who is supporting John Kasich. Cervantes, a Mexican-born handyman who won

the evening’s tax-reform-themed bingo game, had less kind words for Donald Trump: “That’s not the way to run the country, as an angry person.”

Therein lies Ayotte’s problem. To win in November, the junior senator will have to attract conservative, anti-establishment Republicans to her cause while holding on to moderates like Cervantes who are turned off by Trump and Ted Cruz, who won the Iowa caucus. “It’s not like Passover, where the voters say, ‘Oh, these are the good Republicans that we’re meant to spare,’” says Fergus Cullen, a former state GOP chairman from 2007 to 2008, who recently endorsed Kasich. “They kill them all.”

At least 9 of the 34 Senate seats up for election in November are likely to be competitive. Six are held by Republicans in states Obama won in 2012, including Florida, Illinois, and New Hampshire, a once solidly red state that’s been trending increasingly Democratic. Ayotte is expected to face the state’s current Democratic governor, Maggie Hassan, who was reelected in 2014 by five points. “There’s not much margin for error for either campaign,” says Andy Smith, director of the University of

New Hampshire’s Survey Center.

Unsurprisingly, Hassan supporters see a Trump or Cruz nomination as a dream come true. “It’s just easy to paint a picture that she’s one of them, of that extreme right wing of the Republican Party, which is taking control of the Republican Party,” says Hassan campaign treasurer Kathy Sullivan, a former state party chair. “We should be that lucky.”

When Ayotte ran for Senate in 2010, she was a widely liked state attorney general who’d been appointed by a Republican governor and reappointed by a Democrat. She racked up endorsements from John McCain and Sarah Palin. In office, she’s joined most of her fellow Republicans in voting against a 2013 gun control bill, against funding Planned Parenthood, and in favor of phasing out Medicaid expansion under the Affordable Care Act. But she’s sided with Democrats in supporting comprehensive immigration reform and the Environmental Protection Agency’s Clean

FROM LEFT: SCOTT EISEN/BLOOMBERG; PATRICK T. FALLON/BLOOMBERG (2); DANIEL ACKER/BLOOMBERG; ANDREW HARRER/BLOOMBERG; BILL CLARK/CORBIS OUTLINE; AP IMAGES; PHOTO ILLUSTRATION BY 731



Campaign Ads Big Spenders

The size of the Republican field and the strength of Bernie Sanders's challenge to Hillary Clinton for the Democratic nomination have led to an explosion in ad spending in New Hampshire this year vs. 2012. — *Tim Higgins*

\$2m **\$82m**

2012 pre-primary
ad spending

2016 political ad spending through Feb. 1

	Clinton \$9.5m	Sanders \$8.4m
	Bush \$26.6m	Rubio \$10.9m
		Christie \$10.7m
		Kasich \$10.4m
	Trump \$2.4m	All others \$2.7m

TOTALS INCLUDE SUPER PAC AND CAMPAIGN SPENDING.
DATA: KANTAR CAMPAIGN MEDIA ANALYSIS GROUP



Power Plan. Ayotte has also been critical of her colleague Cruz, blasting him for his role in shutting down the federal government in 2013. “She’s sort of in the McCain mold,” says Steve Duprey, Ayotte’s finance chair. “She does what she thinks is right and will tell her own party to go pound sand when they’re wrong.”

That hasn’t endeared her to some of her party’s voters. Inside the turreted Nashua hotel where Trump hosted a rally on Jan. 29, Colleen King contrasted Ayotte’s vote for immigration reform with Trump’s anti-immigrant stance. “His whole position is what is the best for America, to get America back to not being the sugar daddy for the world,” said King, a 60-year-old wearing a red-and-white MAKE AMERICA GREAT AGAIN scarf. “I think she’s like a piece of wet spaghetti. She flip-flops.”

Ayotte has also alienated some of her Republican colleagues in the state. After Republicans retook the New Hampshire House in 2014, Ayotte opposed ex-speaker Bill O’Brien’s bid to reclaim his old post. O’Brien, who is now Cruz’s New Hampshire campaign co-chair, organized a meeting

in November aimed at finding someone to challenge Ayotte in the Republican primary. No one has emerged, but the filing deadline for the race isn’t until June. “Kelly was given to us by the Republican National Committee,” says Karen McRae, an 11-term former state representative. “She doesn’t represent New Hampshire.”

Ayotte’s campaign disagrees. “In stark contrast to Hassan, Kelly has held more than 50 town halls since taking office to hear directly from voters and bring their ideas and concerns to the Senate,” says her campaign manager, Jon Kohan. “Regardless of how the presidential race plays out, our campaign is focused on drawing a contrast between Kelly’s record of delivering results for New Hampshire and Governor Hassan’s failure to lead or even take a stand on the issues that matter most.”

New Hampshire has occasionally



voted split tickets: In 2000, the state went for Republican George W. Bush in the presidential race but reelected Democrat Jeanne Shaheen as governor. (Shaheen is now New Hampshire’s senior U.S. senator.) Ayotte allies say voters know her as a problem solver who prioritizes Granite State issues such as heroin treatment funding and as someone who’s a ubiquitous presence around the state. “If it was anybody else, I would say they didn’t have a chance,” says Andy Crews, a former chair of the Greater Manchester Chamber of Commerce



Presidential campaigning in New Hampshire, Feb. 2



and the state auto dealers association. “She is the realest, most authentic person that I’ve met in politics—there is no question about that—and I think those deposits will pay off, because they were authentic.” —*Josh Eidelson*

The bottom line Presidential politics may get in the way of New Hampshire Republican Senator Kelly Ayotte’s reelection effort.

Public Finance

Christie Steps In to Save Atlantic City

▶ A state takeover prevents bankruptcy—at a cost

▶ “We need a little help to get through a hard time”

Atlantic City has seen its tax base, neighborhoods, and finances decay for years. New Jersey Republican Governor **Chris Christie** interrupted his presidential campaigning in New Hampshire and returned to his home state on Jan. 26 to announce a solution

for keeping the city out of bankruptcy: a state takeover. The Christie plan, which the Democratic-controlled legislature must approve, sets a five-year horizon for restructuring the city’s \$240 million in debts. “Bankruptcy is always a last resort,” Christie said at a Trenton press conference. “That would not be good for the city of Atlantic City and not something we would want to engage in.”

For Atlantic City’s 38,000 residents, the plan is almost certain to bring more pain. Closing the city’s \$100 million budget gap will likely mean service cuts for residents and layoffs and benefit reductions for municipal workers.

In addition to its fiscal woes, Atlantic City faces an existential question: how to reinvent a town whose main attraction, gambling, is no longer enough to sustain it. A decade or so ago, New Jersey officials publicly mused about transforming the shabby seaside resort into a world-class holiday destination for families. These days, talk about the city’s future centers on building beach houses to appeal to the second-home market. “The beach and the boardwalk make

it a great place for people who may want a second home,” says Kevin Lavin, whom Christie appointed as Atlantic City’s emergency manager in January 2015. (He left to join a consulting company after his contract expired last month.) “You can go into town for entertainment, good restaurants, a play, or a concert and maybe stop by a casino. But casinos won’t necessarily be the central attraction.”

Atlantic City’s incarnation as a gambling mecca dates to the 1970s, when it became the only community in the eastern U.S. with legal casinos. By the time Christie took office in 2010, casinos operating in Connecticut, Delaware, New York, and Pennsylvania had cut into Atlantic City’s base. When Christie unveiled his first plan to revitalize the town, he was blunt about the scale of the challenge: “Atlantic City is dying.” He created a tourist district to develop nongambling entertainment options. It didn’t do much to slow the decline in tourism. He persuaded United Airlines to add direct flights to Atlantic City from Houston and Chicago. Demand was so low, United canceled the routes within a year. ▶

◀ The governor also used the promise of more than \$260 million in state tax incentives to restart construction of the Revel casino, which had stalled in 2010 when Morgan Stanley walked away from financing the deal. Revel opened in 2013 but closed the following year, without ever taking advantage of the tax credits. It was one of four Atlantic City casinos to shutter in 2014. The closures eliminated 8,000 jobs, contributing to a 65 percent drop in the city's tax base and increases in unemployment and home foreclosures. Property taxes have gone up since for residents who remain.

Atlantic City's gambling revenue dropped from \$5.2 billion in 2006 to \$2.6 billion last year. New projects set to open soon in Maryland and Pennsylvania could siphon off hundreds of millions a year. The most ominous threat comes from New Jersey itself, which may end Atlantic City's monopoly on gambling in the state, clearing the way for a new casino in the Meadowlands, only a few miles from New York City. To some Atlantic City residents, that sounds like certain death. "Atlantic City has been generating billions of dollars in tax revenue for the whole state for decades," says City Council President Marty Small, a Democrat. "Now that we need a little help to get through a hard time, Governor Christie is letting us down."

Anxiety about the city's future has inspired some creative suggestions. One state legislator wants to attract tourists by legalizing marijuana in Atlantic City. The owner of Revel, Glenn Straub, has suggested using the empty \$2.4 billion casino to house refugees from Syria and other combat zones—though Christie has said on the campaign trail that he's opposed to letting Syrian refugees, including orphaned children, into the U.S.

The developers, bureaucrats, and elected officials working with the Christie administration have thus far focused on more conventional ideas like trying to lure corporate headquarters. Straub says he plans to open a smaller casino inside the Revel building, perhaps as soon as this June. Atlantic City is advancing plans to build a major sports complex and host tournaments

for amateur athletic teams. "We're not dead, just wounded," Atlantic City Mayor Don Guardian said in Trenton with Christie. "So help us fix ourselves." —*David Kocieniewski, with Terrence Dopp and Romy Varghese*

The bottom line Chris Christie has a plan to prevent bankruptcy in Atlantic City, but no one is sure how to fix the city's underlying woes.

Fundraising

Clinton Throws Some Green to the Party

▶ **Democrats are taking advantage of new rules lifting gift limits**

▶ **"There's more confidence... this money will be used to benefit her"**

Although the primary season is just getting under way, Hillary Clinton has already started raising money as if she's the nominee. In September, Clinton's campaign and the Democratic National Committee created the Hillary Victory Fund, a vehicle for soliciting large donations and distributing the proceeds to her campaign, the DNC, and 33 state parties that have agreed to

accept money from Clinton's fund. (Some states, like Iowa, aren't participating.) Since then, Clinton has raised \$26.9 million for the fund. That includes at least 24 contributions of more than \$300,000 apiece, some from her most loyal donors: Florida billionaire S. Daniel Abraham, Los Angeles entertainment mogul Haim Saban and his wife, Cheryl, and financier George Soros.

Joint fundraising committees are nothing new; in 2012, both Mitt Romney and President Obama set them up after they secured their party's nomination. The 2014 Supreme Court decision *McCutcheon v. Federal Election Commission* effectively eliminated limits on giving to party and campaign committees in each two-year election cycle, set at \$117,000 in 2012. Now, deep-pocketed donors can give hundreds of thousands of dollars each year.

The only other way to make such large contributions is by giving to outside groups like super PACs, which can take unlimited donations but aren't allowed to coordinate directly with candidates. "This is money the candidate controls," says Sheila Krumholz, executive director of the Center for Responsive Politics, a campaign-finance watchdog.

The DNC urged candidates to take advantage of the new rules by creating joint fundraising committees in 2015 for the benefit of themselves and the party, before they know whether they'll win the nomination. The first \$2,700 of any contribution to the Hillary Victory Fund goes straight to Clinton's campaign. The next \$33,400 goes to the DNC, and the remainder is split evenly among participating states.

Bernie Sanders set up his joint fundraising committee, the Bernie Victory Fund, in November. So far it's reported only one contribution, a \$1,000 transfer from the DNC, which is the only entity aside from Sanders's own campaign committee designated as a recipient of funds. No one in the crowded field of Republican candidates has set up a similar vehicle. "I expect that there's more confidence on the part of Clinton that this money will be used to benefit her," Krumholz says.

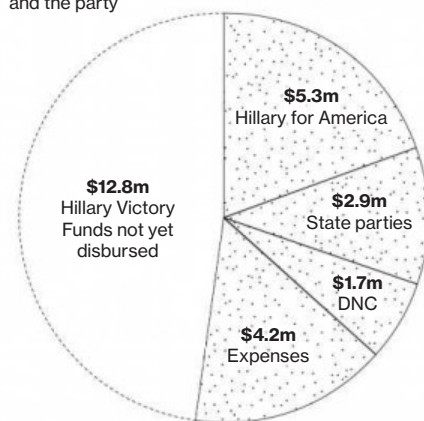
So far, the Hillary Victory Fund

Sharing the Wealth

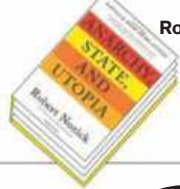
Since Sept. 2015, Clinton has raised

\$26.9m

for the Hillary Victory Fund, which distributes money to her campaign and the party

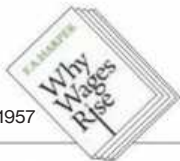


DATA: FEDERAL ELECTION COMMISSION



Robert Nozick, 1974

F.A. Harper, 1957



Milton Friedman,
1962

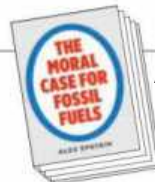


James Otteson,
2014

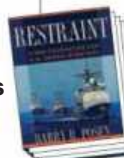
Robert Higgs, 1987



Politics/Policy



Alex Epstein, 2014



Barry
Posen,
2014

Christopher Coyne,
2007



Frederick
Douglass, 1855



There are **32**

recommended readings on the list given to Freedom Partners conferencegoers

has distributed \$2.9 million to state committees. “Hillary’s always made it a priority to strengthen the party,” says Josh Schwerin, a spokesman for her campaign. “She believes in the importance of electing Democrats up and down the ballot.” —*Bill Allison*

The bottom line Taking advantage of a 2014 Supreme Court ruling, Hillary Clinton has given \$4.6 million to the DNC and state committees.

Donors

The Koch Brothers Say Don't Be Shy

► **Donors at a Freedom Partners retreat are told to be more public**

► **“Identify yourself, because this isn’t some secret cabal”**

Charles Koch should be on top of the world. The billionaire industrialist’s conservative Freedom Partners network attracted a record 500 wealthy Americans to its semi-annual retreat in the California desert oasis of Indian Wells over the last weekend in January, a record for the group. It’s preparing to spend \$500 million this year on causes related to free markets and limited government, also a record.

Yet when Koch stepped onto the stage to kick off the four-day summit, his message to the crowd was grim. After laying out his vision of the kind of libertarian paradise he aspires to create, he said, “The tragedy is, in my view, that America is moving farther and farther away from this type of society.” He exhorted his members to step out of the shadows and advocate publicly for their beliefs. “I’ve been identified lately, and it’s not so bad,” he said. “I’m still here. And matter of fact, I’m stronger than ever. Come out

and identify yourself, because this isn’t some secret cabal.”

The Republican presidential election has served as a stark reminder of the limits of the power that wealthy donors can wield in U.S. politics. Donald Trump dominated the polls for months without spending much of his or anyone else’s money while candidates given millions by Koch allies flamed out. Scott Walker, an early favorite of many Freedom Partners donors, withdrew from the race after only 71 days. Members wrote seven-figure checks to super PACs supporting Jeb Bush, Chris Christie, and John Kasich, only to see them flatline in the polls. (Other members of the network have backed Ted Cruz, who won the Feb. 1 Iowa caucuses, and Marco Rubio, who placed third, behind Trump.)

Freedom Partners members, many of whom are owners of private companies, pay \$100,000 to join the network. The twice-yearly seminars take place at fancy resorts amid heavy security. Members often bring spouses and find time for golf between meetings. The Kochs allowed six news organizations, including Bloomberg, to attend parts of the gathering in Indian Wells, on the condition that reporters not approach donors or report on their presence without permission.

The meetings cover a broad range of projects that receive Freedom Partners funding, including providing scholarships, fighting campus speech codes, and building networks of conservative activists. The group is deeply involved in a push to reduce incarceration of nonviolent offenders, as well as an effort in Congress to abolish the Export-Import Bank of the United States.

Neither Charles Koch nor his brother David has endorsed anyone in the Republican primaries, nor has Freedom Partners made a recommendation to its members. Although the organization typically supports

Republican candidates, only about a third of its spending goes to electoral politics, and the Kochs often say they regard Republicans as only slightly less contemptible than Democrats. In an ad hoc gift shop set up for the event, visitors browsed books on a recommended reading list handed out to attendees, which spanned classic economics texts and recent academic publications.


Marc Short, president of Freedom Partners, says the group has been trying to make sense of the Trump phenomenon. “It’s a frustration and even an understandable anger that people feel, that their representatives in Washington don’t represent their interests anymore,” he says. “We agree with the frustration, but we just feel like that’s the wrong prescription to solve the problem.”

Members of the group spent almost \$400 million in 2015, officials say, part of a plan to invest as much as \$889 million electing conservative candidates friendly to Freedom Partners’ policy proposals. Much of that giving has taken place through nonprofit vehicles that mask donors’ names.

Tamra Farah of Colorado Springs, Colo., is following Koch’s advice to be more public about her political giving. After joining Freedom Partners with her husband, Barry, she began working full time for Americans for Prosperity, the Kochs’ largest activist network, as its Colorado communications director. She says she hasn’t paid much attention to the presidential race. Instead, she’s been going door-to-door in Colorado to build support for a repeal of Obamacare. She says, “We’re in this for the long haul.” —*Zachary Mider*

The bottom line A Koch-backed political network is preparing to spend a record \$500 million in 2016 to advance its conservative agenda.

B Edited by Allison Hoffman
Bloomberg.com



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The Phone Companies People Actually Love

► Amid falling costs and frustration with the Big Four, virtual networks are making a comeback

► “You can bring any phone, keep your number, and save money”

Robert Arnold, 68, worked for AT&T for 35 years, testing phone lines and cables for its TV service. While he worked there, he used his employer's cell plan. After retiring, he didn't want to pay AT&T's rates—or Verizon's, for that matter, or T-Mobile's or Sprint's. Paying \$35 a month for one line with no data or texting was too expensive, he says. He's still using AT&T's network, but he's not giving the company a cent.

Instead, he pays \$38 monthly for two lines' worth of phone, text, and data from Consumer Cellular, a much smaller operator that rents capacity from AT&T's network. “I'm getting exactly the same service for less money,” says Arnold, except the customer service is better.

Companies such as Consumer Cellular are known as mobile virtual network operators, or MVNOs. Essentially they're marketing and customer service operations, leasing network capacity from the Big Four U.S. carriers and reselling it under their own brands. Switching carriers typically saves customers at least \$20 a month (some base their charges on use), and MVNOs often target niche audiences—seniors, kids, immigrants.

Years ago, the iPhone killed a lot of these companies, which couldn't keep up with consumer demand for increasingly data-hungry smartphones. Times have changed: It's a lot cheaper and easier to run an MVNO than it used to

be, and more customers are seeking an alternative to the Verizons and AT&Ts of the world. MVNOs account for 36 million (1 in 10) U.S. wireless subscriptions, estimates researcher Strategy Analytics, roughly double their 2009 numbers. During that time, subscriptions at the Big Four rose 28 percent.

Arnold's Consumer Cellular plan includes 750 minutes, 500 megabytes of data, and 3,000 texts; overage runs to 25¢ a minute. AT&T's cheapest monthly phone plan, with unlimited talk and text and 300MB of data, costs \$45.

In the old days, when the 150 U.S.

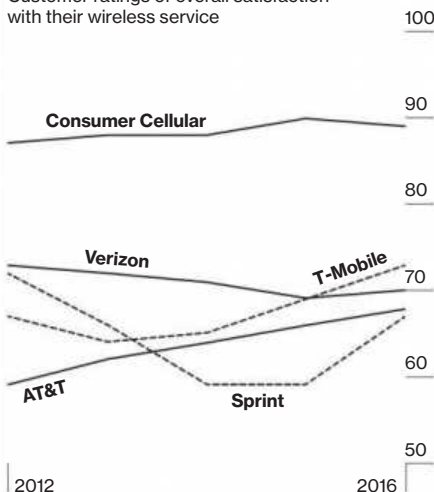
MVNOs had names like Amp'd Mobile and Voce, most didn't turn a profit. Even with brands like Walt Disney and ESPN backing them, many failed in a matter of months, often squeezed by the cost of network capacity. Today the U.S. has about 300 MVNOs, 60 percent of them profitable, estimates Alex Besen, chief executive officer of consulting firm Besen Group. Driving their rise are some fundamental changes in the way the wireless industry operates.

Three years ago, T-Mobile led an industrywide push away from the two-year service contracts familiar to U.S. wireless customers, making it easier for people to comparison shop and change providers. Making a switch cheaper still, the Big Four providers announced last year they'd stop the practice of “locking” their phones, meaning that for the first time you could move your iPhone from Sprint's network to AT&T's without having to buy a new one. (Sometimes, of course, there are technical difficulties.) “The shift in how handsets are purchased has been hugely beneficial for MVNOs,” says Susan Welsh de Grimaldo, an analyst for Strategy Analytics.

Behind the scenes, the big guys were getting a lot more reasonable with MVNOs, too. Wholesale rates for network capacity have fallen as much as 65 percent in the past five years and are expected to keep dropping. Partly, that's because the maturing U.S.

Best-Loved in Class

Customer ratings of overall satisfaction with their wireless service





◀ market offers carriers a shrinking number of ways to increase the number of people using their networks. “The success and growth of our MVNOs is success to Sprint,” says Scott Kalinoski, a vice president at Sprint, which sells capacity to more than 100 MVNOs.

Many MVNOs have begun pitting carriers against one another. When signing a new customer, Consumer Cellular, which works with AT&T and T-Mobile, picks a network based on which has better coverage in the person’s area. A handful of MVNOs, including **Red Pocket Mobile**, work with all top carriers. “We see this as an important part of our value proposition,” says Red Pocket President Joshua Gordon. “You can bring any phone, keep your number, and save money.”

Three MVNO brands—Consumer Cellular, **Ting**, and **Republic Wireless**—sit at the top of *Consumer Reports’* latest industry rankings for customer service satisfaction. The giant names score the worst. Mike Gikas, senior electronics editor at *Consumer Reports*, says people who use MVNOs often report better call quality than they did for the carriers that provide the actual capacity.

Based largely on popular demand, MVNOs are starting to take up more space on retail shelves. Three-year-old **Ultra Mobile** is in about 25,000 U.S. stores, including **Target** and **7-Eleven**. **Pure TalkUSA**, which markets to older consumers and young families, expanded into more than 1,600 **Sears** and **Kmart** stores last year, and Chief Operating Officer Norman Klugman says about 20 percent of subscribers were referred by existing customers.

Consumer Cellular’s revenue rose about 30 percent last year, to \$620 million. From 2012 to 2015, rival Ultra Mobile saw its sales rise from less than \$1 million to almost \$200 million, placing first on *Inc.’s* list of America’s fastest-growing private companies. **TracFone Wireless**, the largest U.S. MVNO and a subsidiary of **América Móvil**, is “a cash machine,” says CEO F.J. Pollak.

Cash machines, of course, have withdrawal limits. TracFone’s revenue rose just 2.6 percent, to \$5.1 billion, over the first nine months of 2015. The company blames more price competition from bigger players. “Carriers don’t seem to

care too much how much they spend on acquiring customers,” says Pollak.

Another factor: The success of the new generation of MVNOs imposes a ceiling on how much each can grow. The Besen Group estimates that 50 to 60 MVNOs will be launched in 2016, including one from **Comcast**. The flip side of customers’ preference for unknown carrier brands, Welsh de Grimaldo says, is that it’s tough to make them stand out. Kalinoski says the companies that appear to be having the most success focus on specific groups of customers, like non-English speakers.

Good customer service and low prices have a pretty broad audience, says Michael Goldstein, a vice president at Ting, which claims about 200,000 subscribers. “Those of us who are hungry and are doing back flips,” he says, “are doing a better job pleasing people.” —*Olga Kharif*

The bottom line The U.S. MVNO industry has doubled since 2009 as costs have fallen and dissatisfaction with bigger companies has grown.

The Machines

Spinning Up a Racing League for Drones

▶ A venture-backed startup tries to turn hobbyist pilots into pros

▶ “We’re creating a whole new form of entertainment”

Conrad Miller, a 36-year-old tech support guy from Boise, Idaho, has spent a year and a half practicing for a moment like this. He’s at Sun Life Stadium, where the Miami Dolphins play, standing near the sidelines just off midfield, waiting for a match to start. The competitors don’t have helmets or pads on, though—they’re all rotors and cameras. Today, the drones have taken over.

It’s shortly before Christmas, and colored lights dotting the stadium highlight obstacles and checkpoints that a dozen pilots must navigate as they steer their quadcopters for three laps around a half-mile course. That’s harder than it sounds, because the drones are moving as fast as 90 miles per hour. In his first

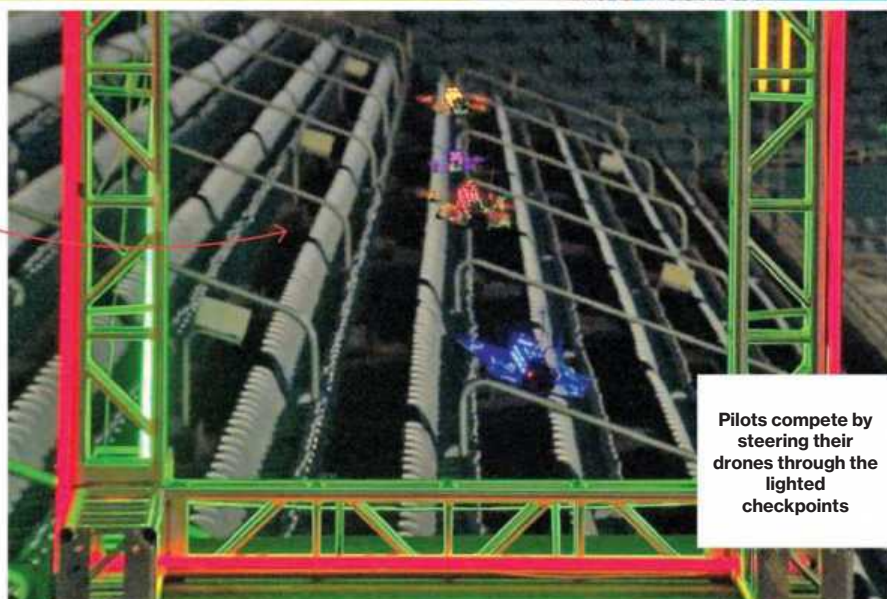
practice run, Miller, who says he practices 20 to 50 hours a week, crashes into one of the first obstacles, landing near three other drones. A series of HD cameras on rigs and booms around the course captures it all.

This was the first contest organized by the **Drone Racing League**, which posted video from the Miami event a month later. Miller is full of analogies. “With the professional cameras, it’s like watching a real F1 race,” he says. “They’re making this into a real-life video game.”

Both comparisons interest Nick Horbaczewski, the league’s chief executive officer, and his investors, who include Dolphins owner Stephen Ross. SuperData Research estimates that competitive video gaming generated \$750 million last year, mostly in video ad sales and sponsorships. Horbaczewski’s league is trying to mimic elements of that model, recording videos that can give people a drone’s-eye view. Eventually, he says, he also wants it to look just as much like Nascar for drones. “We’re creating a whole new form of entertainment that straddles the digital and the real,” Horbaczewski says.

The dozen pilots the DRL invited to Miami used drones custom-built by the league for a couple hundred bucks each. The two-joystick controllers work pretty much like those for an Xbox or PlayStation, and VR goggles let the pilots see through their drones’ front cameras in real time. They’re scored on each lap based on how many checkpoints they reach and how quickly they reach them. After each lap, a DRL-provided pit crew patches up crashed drones or hands the pilots new ones.

There are other drone races out



Pilots compete by steering their drones through the lighted checkpoints

there. In July a race at the California State Fair drew 120 pilots to battle for a \$25,000 prize pool. But Horbaczewski's venture marks the first step toward a pro league with a sustainable business model.

He started thinking about building a league in his previous job as chief revenue officer for Tough Mudder, a leading organizer of arduous obstacle-course races. About a year ago, he went to an amateur drone race on Long Island, N.Y., and he says its potential mainstream appeal was obvious. He's raised \$8 million from Ross's **RSE Ventures**, seed fund **Lerer Hippeau Ventures**, and other investors. Among the sources of revenue under consideration: video ads, sponsorships, and broadcast rights.

Some of that is a long way off. The league has 12 full-time employees and



The pilots' headsets display video from the drones' cameras in real time

is still working out how to edit its HD feeds together. (That's why none of the footage from Miami went online for a month.) So it can't yet count on distribution deals with live-video sites such as Amazon.com's **Twitch**, which have proved profitable for gaming groups. And while DRL teasers call drone racing "the sport of the future," the early video looks a little retro. For '90s kids, the colored lights and strategically placed

smoke machines give off a strong whiff of *Guts*, Nickelodeon's *American Gladiators* rip-off.

That said, it's pretty cool to watch the little copters zip around at top speed. Matt Higgins, CEO of RSE Ventures, says Horbaczewski's immediate challenge is "demonstrating to the world that watching a drone race in some form can be really compelling." There will be five more races in DRL's inaugural season, the next in March at the abandoned Hawthorne Mall in Los Angeles. Around that time, Dubai will host the first World Drone Prix, a tournament backed by Crown Prince Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum.

"We have a lot of confidence in the way we're creating this media," Horbaczewski says, citing the tens of millions of views the DRL's videos racked up in a week. He's still got some work to do, though: Even Higgins says he gets bored with most drone videos in 30 seconds or so. —*Jing Cao*

The bottom line The Drone Racing League is trying to attract viewers with high-speed footage, but it's still working out how to broadcast it.

Hardware

Samsung's Emerging Market Is...Japan?

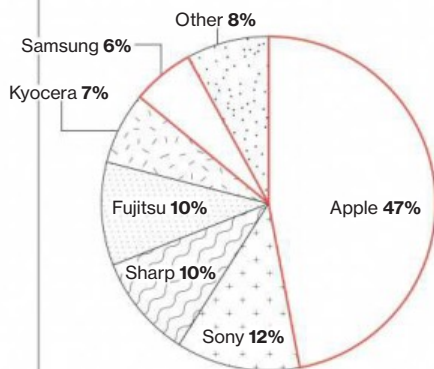
- ▶ The company can no longer afford to cede the No. 3 economy
- ▶ "The overall smartphone market will remain difficult"

The first thing shoppers see when they enter the mobile phone section of Bic Camera, a seven-story electronics store in central Tokyo, is an ad for the iPhone 6S that stretches from the sales counter to the ceiling. Nearby are comparably large billboards for **Sharp's** Aquos and **Sony's** Xperia phones. Conspicuously absent from the marketing blitz is **Samsung**. Its Galaxy S6 is stashed in a corner, next to a Sharp-made flip phone aimed at retirees.

One-fifth of the smartphones shipped around the world are Samsung's, but in the No. 3 economy, it's hard to find one. Samsung has just 6 percent of the 36 million phone market in Japan, according to researcher IDC, while ▶

Deep in the Pack

Smartphone market share in Japan



DATA: IDC

◀ **Apple** has close to 50 percent. Globally, the Korean company still leads Apple, but in Japan it trails local brands such as Sharp, **Fujitsu**, and **Kyocera**.

While Samsung was growing quickly in markets like China and India, it could afford to be somewhat sanguine about treating Japan as an afterthought. Now, not so much: The conglomerate's Jan. 28 earnings report brought a fresh round of bad news, including a quarterly profit almost 40 percent below expectations. With demand for smartphones sputtering globally, annual operating income from Samsung's phone division has dipped below that from its semiconductor business for the first time since 2010 and looks to be headed lower still. "The overall smartphone market will remain difficult throughout this year," Lee Kyeong Tae, vice president for Samsung's mobile communications business, said on a conference call following the report.

So suddenly, Samsung wants to talk about Japan again. The country is "a very important market," says Hiroyuki Tsutsumi, who heads operations there. His plan, broadly, is to persuade people they should buy Galaxy smartphones to take advantage of Samsung's smartwatches and virtual-reality headsets, which require the phones to varying degrees. The company's Gear watches link wirelessly with its smartphones and are close to, but not quite, standalone items. The company's Gear VR headset requires a Galaxy to function.

In Japan, Samsung says, it will more than double its roster of business partners this year, providing mobile devices and accessories to a select group of biotech companies,

automakers, and others. **Mitsubishi Estate Home**, one of Japan's biggest real estate developers, is using Gear VR as a sales tool, letting prospective homebuyers virtually visit properties. **Fuji Soft** has agreed to bundle its note-taking and scheduling apps with Galaxy phones and tablets in hopes of creating an Evernote for business. IDC analyst Melissa Chau says that while the deals can't hurt, in Japan Samsung has neither the volume nor the growth potential to significantly strengthen its global performance.

Samsung's quarterly profit was 3.24 trillion won (\$2.7 billion), and it gained global smartphone share in 2015. But shipments grew just 0.8 percent last year, estimates researcher Strategy Analytics, so Samsung will have to work harder to differentiate itself. In Japan, "we are setting our sights on 2020, aiming to be the top player on Android by then," Tsutsumi says.

That won't be easy, says Neil Shah, research director of Counterpoint Technology Market Research. Besides Apple, no foreign company has managed to win over Japan. In the Bic Camera store, Yoshikazu Shinagawa, a 34-year-old office worker browsing the aisles, says he's not interested in the Galaxy or any of Samsung's other gadgets. "Samsung as a brand just isn't prominent," he says. "It's completely overshadowed." —*Bruce Einhorn, Pavel Alpeyev, and Jungah Lee*

The bottom line After reporting a quarterly profit almost 40 percent below expectations, Samsung is trying harder in Japan.

Software

In Search of the Golden Prescription Pad

▶ **Zephyr Health says it can help track the most valuable doctors**

▶ **"You're desperate for data to make those key decisions"**

Physicians are worth billions of dollars to drugmakers, who see the prescription pad as a path to profits. But it's growing harder for Big Pharma to get doctor's appointments. Since 2010, Obamacare has slowly curbed the mass

travel junkets and fancy meals that drug companies once used to sway the doctors most valuable to their efforts to sell products.

Pharmaceutical companies are now searching for ways to refine their marketing efforts, to target the doctors most compatible with the medications they're pitching. "You're desperate for data to make those key decisions," says Lance Scott, a former marketing manager at medical-device maker Abbott Laboratories. "But while there's lots of data out there, it's really challenging to bring it together." Scott is now chief executive officer of **Zephyr Health**, a data analytics startup promising to help drugmakers identify key medical personnel and find ways to approach them.

Zephyr builds digital dossiers on individual doctors. It starts with basic information on prescription patterns from data clearinghouses such as IMS Health and Symphony Health Solutions. Then its software, with some human assistance, scours the Web for more details. For example, a calendar of speakers scheduled for a prominent medical conference may point to a specialist well-regarded by her peers. Steady publication by another doctor in scientific journals offers clues to the kind of research he does. A physician who's a board member of an industry association might have a hand in writing treatment guidelines—and thus become the focus of a drug company's outreach.

Gathering these strands, Zephyr generates profiles that score each doctor's influence and ability to drive sales on a scale of 1 to 10. The software's slick, mobile-friendly interface lets a drug company search in broad or specialized disciplines (from "oncology" to "non-Hodgkin lymphoma") and ranks each person's influence in the chosen field. It also specifies whether a doctor appears to influence colleagues or simply writes a lot of scripts. The data can guide decisions about whom to invite to a conference or whose prescription pad is most valuable, says William King, Zephyr's chairman. "Depending on where I am in the drug's life cycle," he says, "being able to segment and engage at the right time is critical."

"Working with Pharma is akin to getting pecked to death by a flock of ducks."
—**Zephyr Health Chairman William King**

Innovation

Tritium Removal

Form and function

Tritium is an especially tough nuclear waste to remove, because it's a form of hydrogen and naturally bonds with water molecules. Kurion's hardware separates contaminated water into component elements.

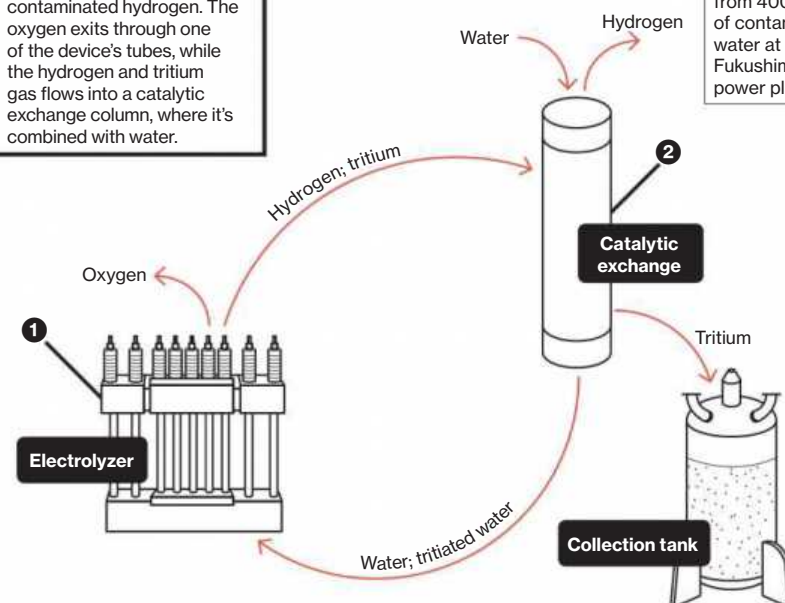
Innovator Gaëtan Bonhomme

Age 39

Chief technology officer at Kurion, a nuclear waste cleanup company with 200 employees that was acquired on Feb. 3 by Veolia, a French waste company

1.

Separation An electrolyzer splits the water's oxygen molecules off from its contaminated hydrogen. The oxygen exits through one of the device's tubes, while the hydrogen and tritium gas flows into a catalytic exchange column, where it's combined with water.



Background In 2014, Kurion began removing strontium from 400,000 tons of contaminated water at Japan's Fukushima nuclear power plant.

Revenue Bonhomme says Kurion took in about \$100 million last year selling cleanup equipment and services, like using chemicals and heat to turn toxic waste into glass.

Funding Japan's economic ministry has granted the company \$8.3 million for research.

2.

Reduction Kurion's proprietary equipment keeps the hydrogen isolated in an ever smaller amount of water cycled through the exchange column. The net effect: 99 percent less contaminated water.

Next Steps

To show it can handle the tritium at Fukushima, Kurion brought a large-scale demo online at its Richland, Wash., office late last year. Kurion says Fukushima's tritium-contaminated water could be processed in as little as 18 months, but that Japan's government will likely take until 2018 to evaluate its technology. "We expect to be processing tritium-contaminated water in the U.S. before then," says Bonhomme. —*Caroline Winter*

Zephyr says it has 10 major clients, including drugmakers **Amgen** and **GlaxoSmithKline**, as well as device maker **Stryker**. The companies have confirmed they're customers but wouldn't say how they use the software.

King, a former sales and marketing director at Johnson & Johnson, founded Zephyr in 2011, frustrated by the fragmented marketing information at his disposal. "I invested in tons of data, and yet I had no way of bringing all that data together," he says. The company has raised about \$34 million in venture funding from investors including Google Ventures and Kleiner Perkins Caufield & Byers. (It wouldn't say whether it's profitable.) Lynne Chou, a partner at Kleiner Perkins who worked at Abbott with Scott, says that within minutes Zephyr's software can compile contact lists her marketing teams used to need months to build.

Some companies, including many drug and medical-device makers, already have more information than they know what to do with, says Pratap Khedkar, managing principal of consulting firm ZS Associates. "Everyone in Silicon Valley wants to start with data. They think, If we get all the data, then magic will happen," Khedkar says. More important, he argues, is asking the right questions, which can often be answered with just a few sources.

Scott says Zephyr updates its physician profiles in near-real time, a serious advantage over hand-culled databases. His 100-employee team is working to refine the software's predictive capabilities and add more data on which patients take what drugs. "There's nothing private anymore," says Chirag Patil, a neurosurgeon at Cedars-Sinai in Los Angeles. While doctors may not exactly be psyched about Zephyr tracking their every move, King says, even they should appreciate the company's ability to narrow marketing campaigns. For a physician, "working with Pharma is akin to getting pecked to death by a flock of ducks," he says. "Do you want nine salespeople queued up to call on you?" —*Caroline Chen*

The bottom line Zephyr has raised about \$34 million in venture funding to track doctors on behalf of drug and medical-device makers.



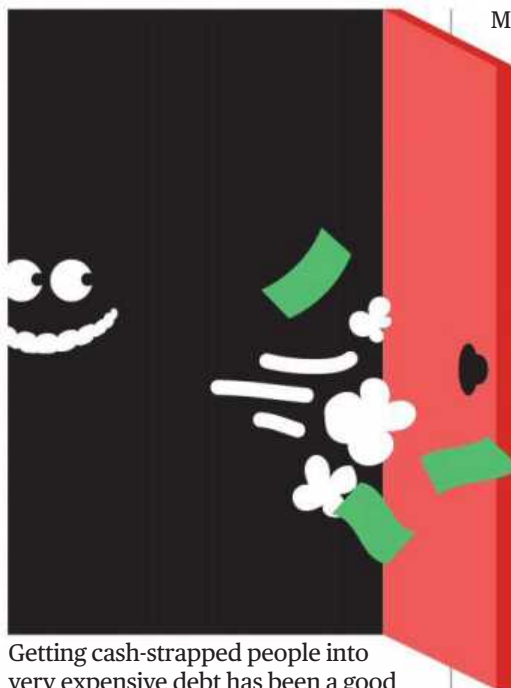
February 8 — February 14, 2016

Payday Lenders On the Run



► New rules could make it hard out there for a 780 percent lender

► Critics “don’t appreciate the demand for the product”



Getting cash-strapped people into very expensive debt has been a good business for Matt Martorello. His company, **Bellicose Capital**, helps an American Indian tribe in Michigan run websites that offer small loans to the public at annualized interest rates as high as 780 percent. Bellicose has collected tens of millions of dollars, with the tribe keeping about 2 percent of the revenue, according to documents provided by a person involved in the deal. Now Martorello is selling Bellicose to the tribe for just \$1.3 million upfront, plus as much as \$300 million in future payments, depending on how the business does. Bellicose projects the tribe will eventually earn \$58 million a year, the documents show.

Martorello isn’t the only person in the high-cost-loan industry who seems to be eager to get out these days. Many are making drastic changes to their businesses, such as switching products or moving overseas. One possible reason: The Consumer Financial Protection Bureau is poised to release new regulations this year, after more than four years of studies and speeches. The agency, which hasn’t finalized the details, says the rules will stop borrowers from taking out short-term loans they can’t afford and racking up fees week after week to buy more time. Lenders say the CFPB will kill off payday advances and similar loans, hurting borrowers with no other options.

“The CFPB made it extraordinarily clear that the path they’re going down is going to eliminate the vast majority of payday lending,” says Ed Groshans, an analyst at Height Securities.

Payday loans are short-term advances, for which the borrower must write a check postdated for the next payday. The regulations will also cover similarly costly loans that allow payment over a longer period of time but still require borrowers to provide access to their bank accounts. Bellicose, which provides consulting services and is not a lender, specializes in these types of installment loans.

So far, such lending has largely been regulated at the state level, and the rules have proved easy to get around.

Many online companies made arrangements like the one between the Lac Vieux Desert Band of Lake Superior Chippewa Indians and Bellicose. Dubbed “rent-a-tribe” by critics, the deals allow companies to get around state laws that cap interest rates by claiming the tribes aren’t subject to those rules. Avoiding federal regulations, like those the CFPB will propose, is tougher. The Federal Trade Commission already has won cases involving tribal payday lenders.

Bellicose’s Martorello says sale talks began years ago and weren’t influenced by the coming rules. James Williams, chairman of the Lac Vieux Desert tribe, says the websites have a bright future and will help fund medical, educational, and social services. “This is, without question, the most important economic development in the more than 179-year-long history of our tribe,” Williams says.

Some storefront-based lenders aren’t even waiting to see the final version of the federal rules before making major changes. The regulations won’t cover pawnshops, so customers at **EZCorp’s** 522 U.S. stores now need to put up valuables such as jewelry or electronics to get emergency advances. The company stopped offering its EZMoney unsecured loans in July, citing an “increasingly challenging legislative and regulatory environment,” even though U.S. and Canadian loans generated \$165 million in fees in 2014. **Cash America International**, which has 825 stores, is making a similar shift.

Others are looking overseas. **First**

"The times when
investors only show
up at shareholder
meetings for the
buffet are over."
—Attorney Harald
Selzner

Cash Financial Services, which closed 22 stores in Texas last year, bought 211 pawnshops in Mexico, Guatemala, and El Salvador in January. Online lender **Enova International** is opening divisions in Brazil and China.

Consumer advocates and even some religious leaders have railed against payday lenders as long as they've been around. Their argument is that the lenders prey on desperate people. The business "relies on borrowers who are unable to repay the loan," says Paul Leonard of the Center for Responsible Lending. What's supposed to be a two-week, \$300 loan for a \$45 fee ends up costing hundreds and hundreds of dollars. The industry says its terms are clear and it's helping customers who need money for emergencies.

Critics "don't appreciate the demand for the product," says Dennis Shaul, chief executive officer of the Community Financial Services Association of America, a lobbying group. "You're never going to see a bumper sticker that says, 'I'm in debt, and I use payday loans.'"

Payday lenders seemed to dodge a death sentence when the Dodd-Frank Act, which created the CFPB, specifically barred the agency from putting caps on interest rates, over the objections of Senators Bernie Sanders (D-Vt.), Sheldon Whitehouse (D-R.I.), and others. The first actions by Richard Cordray, its director, were targeted at credit card and mortgage lenders.

Then the agency started studying the payday market. A 2013 report found that the median borrower took out 10 loans over the course of a year and spent \$458 on fees. The next year, Cordray said he was concerned that too many were

falling into "debt traps," citing findings that some borrowers getting Social Security benefits were indebted year-round.

In March, the agency released a draft proposal for the payday industry. The main requirement is that lenders make sure potential borrowers will have enough left over after other expenses to pay back their loans. It sounds like something anyone would ideally want to do, but payday lenders say many of their borrowers wouldn't qualify.

Economists hired by the industry lobbying group found that just 16 percent of stores would be profitable under the proposal. Shaul says the rules are a backdoor way to cap rates, since lenders that charge less than 36 percent are exempt from many of them. "If that final rule is still as objectionable, we would have no choice but to look at our legal options," he says.

Brian Lynn, president of a 26-store chain called **LendingBear**, puts it more starkly: "We would absolutely, positively have to close our doors."
—Zeke Faux

The bottom line The CFPB wants lenders to show they don't lock their customers in "debt traps." Many payday lenders could fail the agency's test.

Boardroom Fights

The Icahn of Europe Says: Hunt or Be Hunted

► Sweden's Cevian is stalking the region's biggest companies

► "Activism has increased pressure" on European managers

When **Cevian Capital** buys a stake in your company, you have a choice: Join the hunters or become the prey. It's a decision the leaders of German industrial conglomerate **Thyssenkrupp** and Swiss engineering giant **ABB** may soon face. Cevian has built the second-biggest stake in both companies, and if executives fail to act on its demands, the firm will likely start a phase insiders call "the Hunt": seeking to turn investors against management to achieve its goals,

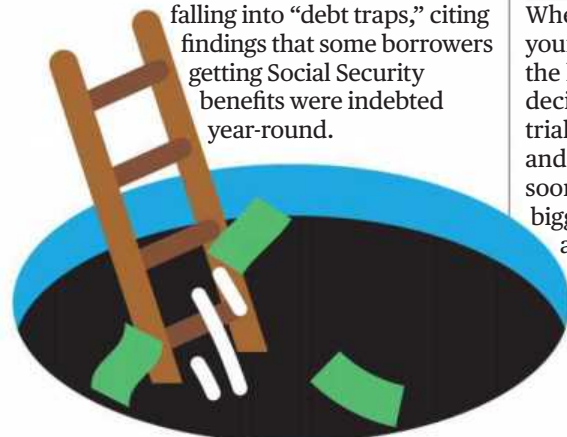
which often entail shedding business units. "They try to increase pressure

by announcing what they want publicly," says Mikael Wickelgren, a researcher at the University of Gothenburg in Sweden. The press is "a good megaphone for what they think."

In the 14 years since management consultant Christer Gardell and investment banker Lars Forberg founded Cevian, the Stockholm-based fund has taken a page from American activists such as Bill Ackman, David Einhorn, and Carl Icahn, an early backer of Cevian and Gardell's occasional tennis partner. Although Gardell and other European activists typically eschew the public proxy fights used by their U.S. peers, they follow a similar script in building a stake large enough to ensure that management is obliged to listen to them. "An uptick in home-grown activism has increased pressure" on European managers, says Husein Bektic, an analyst at researcher Activist Insight in London.

At ABB, Cevian has pushed for asset sales and even floated the idea of splitting the group into three companies, according to people familiar with the discussions. ABB says it's "reviewing all options" for its businesses. Cevian says it benchmarks its investments against similar companies and helps management bring performance in line with competitors. "This requires intensive, fact-based work and literally years of effort, but it is worthwhile," says a representative of the firm. When it speaks to the press, Cevian says, it's simply "to explain who we are and what we do."

Cevian's investment in **Volvo** illustrates the Hunt. After buying into the truckmaker in 2006, Gardell ratcheted up the pressure, demanding improved profitability in interviews with Sweden's *Dagens Industri* and other local media. Volvo (which sold the automaker of the same name in 1999) raised profit targets and announced special dividends. In 2013, Gardell—who's been dubbed "the Butcher" by the Swedish press—told *Dagens Industri* he would "hold the board responsible" for delivering savings from a cost-cutting program. Volvo Chief ►





Gardell

Executive Officer Olof Persson soon increased the number of planned job cuts to 4,400. Cevian still wasn't satisfied. By last February the firm had become Volvo's biggest shareholder. Cevian partner Eckhard Cordes soon joined the board, and Persson was out as CEO. In October, a technology business—which Cevian had wanted Volvo to shed for years—was put up for sale.

Gardell has applied similar pressure on companies in Finland and Britain, and on others in Sweden as well. An early investment was phone company **TeliaSonera**, where Cevian persuaded shareholders to oust half of the eight-member board. At Finnish mining-equipment maker **Metso**, Cevian advocated divesting its paper, pulp, and energy unit. After Metso spun off the business two years ago, shareholders got stock in a new company and saw the value of their investment jump by more than 25 percent. Cevian has reported stakes in about a dozen companies and manages €14 billion (\$15.3 billion) of assets in its two funds, roughly quadruple what it had in 2008. The larger fund returned an average of 13 percent in the three years through March 2015, according to the New York State and Local Retirement System, an investor.

The firm invariably starts with an amicable approach to its targets, sometimes inviting executives on actual hunting expeditions through the forests of northern Sweden. Cevian seeks seats on committees responsible for setting strategy and appointing managers, then grills executives about operations. When its analysts spot inefficiencies or opportunities to profit from a spinoff, they're quick to recommend selling units, one person says.

Thyssenkrupp is resisting Cevian's pressure. The fund announced it had accumulated a 5.2 percent stake in 2013, which it's since increased to 15 percent. Thyssenkrupp CEO Heinrich Hiesinger outflanked Gardell by securing the supervisory board's unanimous approval for a reorganization plan in November 2014, two months before a Cevian partner became a director. To limit Cevian's insight into Thyssenkrupp, Chairman Ulrich Lehner has barred the fund's partners from speaking with anyone

other than him and Hiesinger, according to a person familiar with the company. (Thyssenkrupp

declined to comment.) Those moves have spurred Gardell to start preparing the Hunt at Thyssenkrupp, according to two people who regularly deal with Cevian. "The times when investors only show up at shareholder meetings for the buffet are over," says Harald Selzner, a lawyer at Latham & Watkins in Düsseldorf who advises companies coping with activists. "Activism is changing how boards in Europe run their business and interact with shareholders." —*Alex Webb and Tino Andresen*

The bottom line Stockholm-based Cevian is shaking up European boardrooms, following the script of Americans like Carl Icahn and Bill Ackman.

Lending

A Huge Ponzi Scandal Rattles China

► **Authorities say Ezubo was a \$7.6 billion fraud**

► **"It was just a matter of time" before a big player blew up**

Almost overnight, Ding Ning and Zhang Min struck it rich with the hot new thing in Chinese finance. They took an old-line industrial company and in 18 months transformed it into an Internet site that directly linked borrowers to lenders. But authorities say it was all a lie—a vast Ponzi scheme that seems to have been orchestrated by the Bernie Madoffs of China.

The story is a tangled tale that stretches from China's fertile heartland in Anhui province to the war-torn reaches of northern Myanmar to the palm-lined streets of Beverly Hills. The China Banking Regulatory Commission, which oversees the industry, has warned that the explosive growth of so-called peer-to-peer (P2P) lending means other problems could be lurking out there, too. China has more than 3,600 P2P lenders.

"It was just a matter of time before we saw something this big keel over," says Zennon Kapron, managing

director of Kapronasia, a consulting firm based in Shanghai.

The alleged scheme involving Ding, Zhang, and assorted associates unraveled after a monthslong investigation into their **Yucheng Group** and its P2P platform, Ezubo, which had been celebrated as a new model for financial services. The numbers are staggering: Authorities say Ezubo defrauded more than 900,000 people out of the equivalent of \$7.6 billion by promising them returns of up to 10 times the official deposit rate. That would make it the largest Ponzi scheme in Chinese history.

Ezubo translates to "easy-to-lease," and it allowed the public to invest in the underlying assets of leasing contracts. Investors were then supposed to get returns—from 8 percent to 14.6 percent—from the cash paid by people taking the leases. According to the official Xinhua News Agency, however, almost 95 percent of investment projects listed on the website don't exist. Among 207 lessors Ezubo claimed to work with, only one had done business with it, says Xinhua.

Ding, the 34-year-old chairman of Yucheng Group and its related companies, said in a confession broadcast on Feb. 1 on state-run China Central Television that he embezzled about 1.5 billion yuan (\$228 million), mostly from Ezubo. He also gave 550 million yuan raised on Ezubo to Zhang, Yucheng's president and his girlfriend, citing "personal reasons." He said he also gave her a villa in Singapore, a pink diamond ring, an emerald necklace, and luxury cars.

Apart from Ezubo, Yucheng's other businesses include a manufacturer of nails and screws. It had also opened a bank in an area of Myanmar disputed in a long-running civil war, China's *Caixin* magazine reported. As Ezubo grew, so did Ding's ambitions. In November, Chinese entertainment executive Bruno Wu unveiled a plan for a \$1.6 billion fund to finance Hollywood movies in cooperation with Yucheng at an exclusive dinner at the W Hotel in Beverly Hills, according to the *Hollywood Reporter*. In an e-mail, Wu said he dropped the deal before it was finalized and expressed "shock" at Ding's confession.

Just a few months ago state media were still giving the lender glossy

coverage. At an industry conference hosted by Ezubo in June, government officials, corporate leaders, and legal experts discussed the development of Internet finance and lauded Ezubo's business model. The company promoted itself with TV commercials and by placing its logos on seat covers of the Shanghai-Beijing high-speed train.

In early December, when Ding and Zhang realized that new investment inflow could no longer meet interest payments for the old investors, they started to move assets, destroy evidence, and prepare to flee, according to their confessions. On Dec. 8 police arrested Ding and Zhang. Police used two excavators and dug for 20 hours to unearth 80 bags of documents that Ezubo executives had buried 20 feet underground on the outskirts of Hefei, in Anhui province, Xinhua reported. Investigators found the company had spent heavily to buy details on companies to help it fabricate investment projects.

The P2P industry has grown quickly in China, lending 982 billion yuan in 2015, almost quadruple the total from the year before. Authorities let online lenders flourish as a way for small businesses to get financing without turning to back-alley shadow bankers. In 2012, as P2P began to take off, only 3 percent of China's 42 million small business owners could get bank loans, according to the World Bank.

"I think the government allowed this all to happen because it was desperate to pump money into the private economy as all the other slowdowns started to happen," Steve Dickinson, a Qingdao-based lawyer for Seattle firm Harris Moure, said in an e-mail.

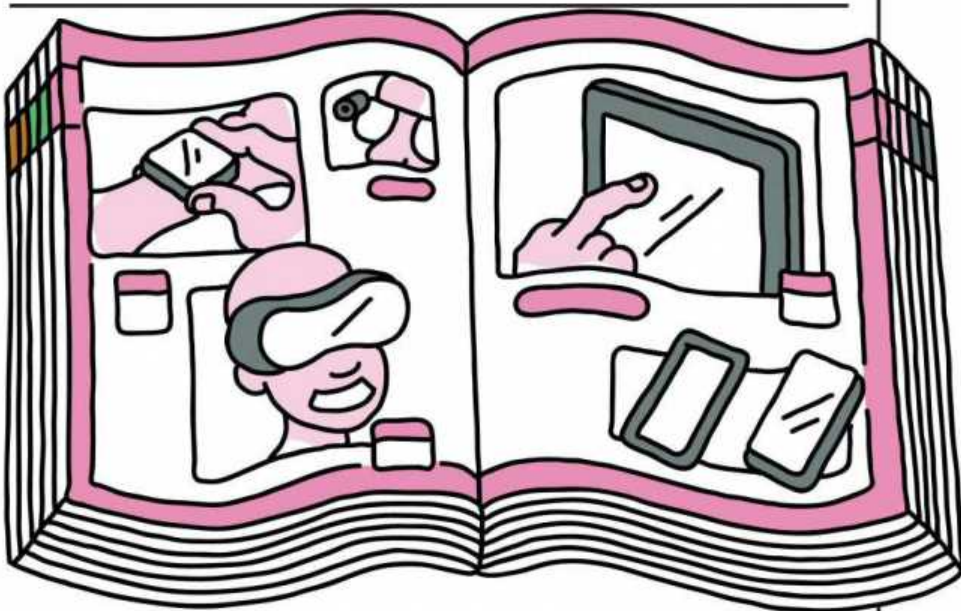
Policy appears to be shifting. In December the country's banking regulator said 1,000 P2P companies were "problematic," and it announced draft rules to restrict such lenders and pledged to "cleanse" the market. "The Chinese government is supposed to be seeking stability," said Dickinson. "This type of widespread financial disaster is obviously not supportive of stability."

—Bloomberg News

The bottom line China's peer-to-peer lending industry is under suspicion after the discovery of a Ponzi scheme with 900,000 victims.

Bid/Ask

By Kyle Stock



\$1.9b

J Sainsbury shops Argos. The British supermarket giant acquired Home Retail Group, the company behind Argos general stores. The deal makes Sainsbury the biggest nonfood retailer in the U.K., adding to its groceries 800 shops selling toys, electronics, and home and garden gear. More important, the Argos delivery network will help Sainsbury compete with Amazon.com.

\$42.2b

ChemChina snaps up Syngenta. A deal to buy the Swiss pesticide and seed giant caps a string of acquisitions for government-owned China National Chemical.

\$5.8b

Abbott Labs buys Alere. Massachusetts-based Alere offers a range of point-of-care products and services, from detecting the flu to measuring cholesterol levels.

\$5.5b

Foxconn sweetens its bid for Sharp. The Taiwanese electronics assembler is offering slightly more than Innovation Network Corp. of Japan, a government-backed investment fund.

\$4.4b

Dominion Resources buys Questar. The Virginia-based company joins a crowd of electric utilities buying natural gas distributors.

\$2.8b

Stryker acquires Sage Products. While Stryker specializes in surgery tools and replacement joints, Sage makes devices to clean and position patients.

\$2.3b

Lowe's lands Rona. The home-improvement empire finally gets a foothold in Canada, four years after Rona rebuffed its \$1.8 billion bid. Rona has almost 500 stores and nine distribution centers.

\$10.5m

A precocious painting leads an auction. An Egon Schiele self-portrait, completed when he was 19, fetched the highest price at Christie's auction of impressionist and modern art in London.



February 8 — February 14, 2016

The Secret Ingredient

A hand wearing a white latex glove is shown placing a square, fudgy brownie onto a round, ornate silver tray. The brownie is dark brown with a slightly lighter top. The tray is reflective and sits on a dark green surface. The background is dark and out of focus.

In a \$12 Brownie

► Infused edibles are a growing part of the \$5.4 billion cannabis business in the U.S.

► It's "probably the most exciting segment of the marijuana industry"

Peggy Noonan knows a thing or two about marijuana. She was a drug runner between Mexico and the U.S., before earning her living as a dealer in Arizona. Both stints ended badly, with Noonan serving time in a Mexican jail and slapped with a felony conviction in Arizona. All that feels like ancient history, says Noonan, who's among the thousands of "ganjapreneurs" in the burgeoning market for edible marijuana products. "It was pretty wild, life coming full circle," she says.

Noonan's **Cornucopia Health and Wellness** in Tucson sells 40 products including Weedish Fish gummies, extra-large German chocolate brownies, and Serenity Tincture—all infused

with varying degrees of pot—to about 60 so-called dispensaries in Arizona for medicinal use. The company, which opened for business in April 2014, employs eight people and has seen sales double over the past three months, says Noonan, who's not to be confused with the columnist and Ronald Reagan speechwriter of the same name.

Marijuana is legal for adult recreational use in Alaska, Colorado, Oregon, Washington, and the District of Columbia and for medical purposes in 23 states, the District of Columbia, and Guam. U.S. sales of legal cannabis reached \$5.4 billion in 2015, up from \$4.6 billion the year before, according to ArcView Market Research. Edibles

and other infused products—defined as anything other than the bud itself—make up at least half of the total, dispensary owners say.

"It's probably the most exciting segment of the marijuana industry," says Christian Hageseth, founder and chairman of **American Cannabis Partners**, a holding company for marijuana-related businesses. "We still haven't identified who's going to be the Apple computers or the McDonald's hamburger or the Coca-Cola" of edibles.

Many people have heard of rapper Snoop Dogg's Leafs brand of pot edibles, but there are scores of companies popping up across the country, with names like **Dixie Elixirs**,

Incredibles, and **BlueKudu**, adding new items to the marijuana menu. Keef Cola, a soft-drink line owned by **CanCore Concepts**, is expanding this year from Colorado to Oregon and Nevada, according to the brand's co-founder Erik Knutson. Its Colorado licensee, **Denver Packaging**, sells Keef Cola in more than 380 dispensaries and turned a profit last year.

Despite the recent momentum on legalization, the industry faces plenty of hurdles, not the least of which is convincing lawmakers and the public that edible marijuana products are safe. One concern is the obvious appeal of pot-infused candies, cookies, and soda pop to children.

In the past couple of years, several states have taken action, some spurred by reports of an increase in emergency-room admissions. Most require marijuana edibles to be sold in child-resistant packaging that's opaque, so the contents aren't visible, and free of cartoons or other images that may appeal to children. The American Association of Poison Control Centers fielded 352 calls in 2013 and 456 in 2014 about accidental exposure to THC, the psychoactive chemical compound in marijuana, in children under 12. In 2014, by contrast, there were 17,563 reports of children ingesting deodorants and 28,009 incidents involving diaper cream.

Noonan, who grew up in an affluent family on Central Park West in Manhattan, began smuggling marijuana into the U.S. from Mexico after graduating from Arizona State University in the late '60s. The weed was supplied by "farmers coming down the mountains on donkeys with bales," she recalls. "It wasn't any kind of syndicate. It wasn't like cartels."

Noonan was arrested in 1969 and spent three months in a Mexican jail. After serving her time, she returned to the U.S. and started dealing. The feds

caught up with her in 1975. Noonan's ex-husband was sent to prison for two and a half years while Noonan, pregnant at the time, got probation.

After her marriage broke up, she moved back to New York, worked as a drug counselor, then enrolled at Parsons School of Design. She started her own company as a designer, developer, and contractor in the high-end residential market. She relocated the business to Tucson in the late 1990s, changing its focus to restaurants, and began laying the groundwork for Cornucopia after Arizona legalized medical marijuana in November 2010.

The edibles are baked at a commercial kitchen, part of a 13,000-square-foot "grow" site where Noonan cultivates and harvests marijuana. "We are constantly tasting," she says, explaining that the company first makes uninfused versions of its products for sampling. Once she's satisfied with each batch, her two-person sales staff loads the goods into unmarked vans (to avoid attention) and delivers them to dispensaries across the state. What Cornucopia bills as "The World's Best Brownie" can fetch as much as \$12.50 retail. It contains 40 milligrams of THC. **Globe Farmacy**, an Arizona dispensary that sells the brownie, recommends customers start with 10-milligram increments.



Storage services that really deliver 42

Small to Big: How 4Moms kept its baby seat from meowing 46

Atelier Cologne: Smells like Paris, born in New York 44

Noonan has ambitions to expand to California, Colorado, and Washington state dispensaries through licensing agreements to comply with state laws. "Going national is ultimately the goal," she says. In the meantime, she's using Facebook and Instagram to bring attention to her brand and collect customer feedback. "We like that, getting comments, even if it's negative. It all helps." —Jennifer Kaplan

The bottom line Sales of marijuana edibles rose in 2015 as more "ganjapreneurs" piled into the fledgling industry.

Real Estate

90 Bedrooms, 4 Baths, Millions in Headaches

▶ A Czech brokerage listing only historic buildings racks up sales

▶ "This is a business for dreamers and enthusiasts"

The Libejovice chateau looks like something out of a 19th century romantic novel: an elegant, mustard-hued Renaissance palace with tall windows and elaborate balcony railings bearing the noble Schwarzenberg family's coat of arms. Natalia Makovik will sell it to you for less than the price of some Manhattan studio apartments. The catch: Restoring the place, a two-hour drive south of Prague, could cost 10 times the purchase price. "I look at a ruin, and I see an investment opportunity," says Makovik, founder of **VIP Castle**, a real estate brokerage specializing in historic buildings.

There are plenty of such opportunities in the Czech Republic, with its 2,000-plus castles and chateaux, the legacy of a turbulent history of feudal lords, royal dynasties, and minor aristocrats. Makovik started her business in 2007, eight years after she arrived penniless from her native Belarus. The history buff had fallen hard for the run-down castles she discovered in the Czech countryside. Lacking ▶



Noble Homes



€450,000

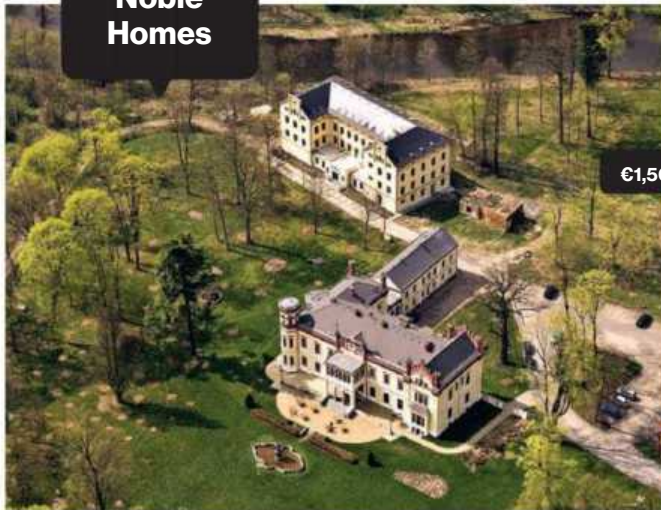
▲ **Fort of Olomouc**
Built 1853

Features The property is surrounded by a moat

► **Chateau Mostov**

Built 17th century

Features Has been repurposed into a hotel, with 100 guest beds, plus a dungeon



€1,500,000

▲ **Ancestral castle of Ernest Solvay**

Built Late 19th century

Features 50 rooms, pool, cinema, sauna, and billiard room

▼ **Fortress Kunzov**

Built 1907



€450,000

► **House of Geydl**
Built 1557

Features A Renaissance-style mansion with two apartments and a pastry shop



€270,000



€19,000

▲ **Kolovratsky Castle**
Built 1595

► **Castle of Count Thurn**

Built Late 17th century

Features Price includes adjacent summer residence; brewery and wine cellar also available for purchase



€425,000



€3,000,000

◀ the money to buy one, she decided to make them the focus of her career—first as a tour guide and then as a real estate agent.

Although it took Makovik more than five years to close her first deal, she says she now sells up to three historic properties a month, priced from €12,000 (\$13,000) to €4 million. She typically takes a 3 percent commission, which last year earned her about 4 million Czech korunas (\$161,000). The 400 or so properties she lists range from relatively modest brick and stone manors to palatial expanses with gardens, ballrooms, and enough beds for the ball guests to sleep over. Because many of the properties are owned by municipalities, she travels the country speaking with mayors and town representatives. Typically it takes months of meetings to persuade officials to sell what many consider a part of their local heritage.

Makovik faces competition from international real estate companies such as **Century 21** and **Re/Max**, which are adding more historic properties to their portfolios. She says she has an edge

as the only company focusing exclusively on such buildings. And with her background, she says she can better relate to her clients—mostly wealthy Russians or Ukrainians looking to park their money abroad. “To sell a castle, you have to be more of a psychologist than a real estate agent,” she says. “It can take years to cultivate a client and find the right property.”

Lenka Duskova, a broker from **Luxent**, an agency that specializes in high-end homes in and around Prague, says selling castles is a challenge. Clients love the idea of living in an elegant historic manor, but it doesn’t take long before they balk at the costs of renovation and shy away from the realities of living in the biggest building in a tiny Czech town. “It’s not an investment,” Duskova says. “This is a business for dreamers and enthusiasts.”

In 2010, Sergei Chernichkin, a

Morgan Stanley

Meet Freddy, Master of the Unexpected.

Maybe Freddy's a little genius, and he's ready for college five years early. Maybe he'll trade his MBA for an MFA. Or he'll have a quarter-life crisis, and move back home to figure things out. No algorithm can capture the richness and complexity between a parent and a child. But our Financial Advisors can. Let's work together on a human-powered financial plan, and help you prepare for the curveballs Freddy's going to throw.

morganstanley.com/unexpected



◀ Russian entrepreneur, swooned over a 16th century ruin in Kynsperk nad Ohri, a town of 5,000 near the German border. Makovik was offering it on behalf of the municipality for 300,000 korunas. Chernichkin couldn't resist and decided to restore the property to its original use as a brewery; beer has been made in Kynsperk since 1595. He created a brand called Kynspersky Zajic and built a restaurant serving local specialties such as roast pork and dumplings. Next up: a hotel and a spa where guests can indulge in beer baths and malt skin treatments. "The place had a 400-year history of brewing, and I was really intrigued," says Chernichkin. "I would have never been able to do anything like that in Russia."

Price is a big part of Makovik's sales pitch. Castles in the Czech Republic are a bargain compared with Britain, France, Italy, or Germany, where similar properties typically cost 5 to 10 times more. Relatively inexpensive labor makes renovations more affordable, and Czechs have no inheritance taxes and will give tax breaks to owners who restore historic buildings.

The asking price for the 54,000-square-foot Libejovice chateau and its overgrown 80-acre park in bucolic southern Bohemia is €1.25 million. From a distance, the place looks opulent. On closer inspection, it's a wreck: Icy wind whistles through broken windows, the roof sags, and ripped-up parquet floors are partly covered by cheap linoleum.

A floral-patterned stucco ceiling is obscured in places by crude plastic fluorescent lights. The 90 bedrooms share just four communal showers.

It tells the story of 20th century Europe. The Schwarzenbergs (the forebears of the recent Czech foreign affairs minister and presidential candidate Karel Schwarzenberg) lost the castle in a land reform in 1923. The palace was used by the Nazi-era Hitler Youth during the German occupation, then by the Soviet army in communist Czechoslovakia. Each group inflicted its own damage, and communist indifference to aristocratic heritage did the rest. For the dreamers who make up

most of Makovik's customers, the heritage and even the dilapidation are all part of the allure. "These people already have everything—cars, private planes, beach houses," she says. "But when they see a historic chateau, their eyes light up. It's like a fairy tale for them." —*Ladka Bauerova*

The bottom line Natalia Makovik finds that being a history buff helps her sell Czech fixer-upper castles to wealthy Russians.

Startups

The Real Life Storage Wars

▶ **Newcomers challenge the industry's haul-it-yourself giants**

▶ **"We're a very affluent society. People buy, buy, and buy"**

A warehouse worker at storage startup **RedBin** spent 75 minutes on a recent morning piloting a van from company headquarters on the Brooklyn waterfront to an apartment building in Harlem, where he dropped off two empty plastic boxes. Then he drove back to Brooklyn. Four days later, RedBin dispatched another van to retrieve the containers, now full, which the company will store for \$5 per box per month.

It may not seem like a speedy path to riches, but founder Tom Anderson believes his business is destined to prosper for a simple reason: U.S. consumers are a lot better at acquiring than they are at letting go. A serial entrepreneur whose last company managed logistics for U.S. military contractors shipping cargo to Afghanistan, Anderson launched RedBin in September. He also owns a self-storage center in Oakdale, Long Island, which has allowed him to study the behavior of the American pack rat up close.

To Anderson, the on-demand model seemed like a good way to reach customers who live in cramped apartments that are far from traditional storage facilities, which are more abundant outside city centers. RedBin doesn't charge for the first four pickups and deliveries, and customers

can summon their bins with 24 hours' notice using the company's smartphone app. "We're building a bridge between a person's need to see their stuff and their need to keep it in storage," he says.

In New York, RedBin is competing with on-demand storage companies including **Box Butler**, a subsidiary of Iron Mountain; **MakeSpace**, a venture-backed startup that also operates in Washington and Chicago; and **Clutter**, which raised \$9 million in October from Sequoia Capital.

Similar services have cropped up in Boston, Denver, Los Angeles, and San Francisco. There are enough players that **Boxbee**, a startup backed by Google Ventures, has dedicated itself to making software to help on-demand storage companies manage warehouses, delivery vehicles, and billing.

The startups' business models vary slightly—RedBin stores boxes that measure three cubic feet and a handful of specialty items, such as bicycles and air conditioning units, while MakeSpace, which has raised \$10 million from Upfront Ventures and others, will take your piano. But all offer delivery service to entice customers who would otherwise have to do the heavy lifting themselves. "When we started looking at this industry, we understood the need for storage; we just didn't understand why the experience was so poor," says Clutter co-founder Ari Mir. So the California company hired movers to help customers pack, photograph, and transport their belongings. Sixty percent of storage customers live in 25 U.S. metropolitan areas, says Mir, and

his company is focusing on those markets.

More than 50,000 self-storage facilities are in the U.S. All told, storage businesses will generate \$33 billion in 2016, estimates research firm IBISWorld, up

from \$24 billion in 2010. "We're a very affluent society," says Ellen Faye, president of the National Association of Professional Organizers. "People buy, buy, and buy."

Because construction of storage

"To sell a castle, you have to be more of a psychologist than a real estate agent. It can take years to cultivate a client and find the right property."

—*Natalia Makovik*

\$5

a month



Price for one stored box from RedBin

IN CASE OF RATE ENVY, CONTACT US IMMEDIATELY.

ACCURATE AS OF 01/19/2016

1.00%
ANNUAL
PERCENTAGE
YIELD On All
Balance Tiers

The Ally Bank Online Savings Account.

With consistently great rates, no monthly maintenance fees and 24/7 customer care, our Online Savings Account is sure to help your money grow. Just remember that your variable rate may change after opening the account and fees may reduce earnings. Bank where No Branches = Great Rates.

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centers flagged during the recession, demand for lockers has outstripped supply. Occupancy rates and rents are at all-time highs, according to Chuck Gordon, chief executive at **SpareFoot**, a website that helps people comparison shop for the best deals.

Those trends have been a boon to the newcomers, helping them stay competitive on price while they offer better service than self-storage facilities. It has also prompted some of the larger operators, including Malvern, Pa.-based **CubeSmart**, to experiment with on-demand.

What's not clear, says Gordon, is whether the startups are attracting a new kind of storage user or grabbing customers who would have rented space from traditional operators. "There's a to-be-determined number of regular storage customers choosing this option because it's more convenient," he says. "Does 5 percent of the market want this, or 50 percent? That's the big question." —Patrick Clark

The bottom line Startups are trying to carve out a slice of the expanding storage industry by offering on-demand pickup and delivery.

Retail

A Maison de Parfum With NYC Roots

► **Atelier Cologne expands markets for its citrus-based scents**

► **In the U.S., "things happened quickly. That's not very French"**

When French natives Sylvie Ganter and Christophe Cervasel decided to create their own fragrance business, they started in New York City. The couple, who met a decade ago while working in the U.S., discovered a shared penchant for cologne, a style of fragrance invented in 18th century Germany. Once favored by European royalty, it's suffered recently from a reputation as a down-market cousin to French perfume. Both are a blend of essential oils and alcohol. The greater concentration of essences in perfume give it more staying power. "I always wore cologne, but I was

Narrative Scents

Atelier Cologne creates stories for each fragrance

Trèfle Pur "He had a good feeling about it. That's the thing about luck, you feel it or you don't."

Bois Blonds "They spoke in whispers, breathing at the pace of the wind."

Oolang Infini "His breath fogged the window while he watched new snow fall upon the frozen lake. He came here to catch up on his writing and escape the city."

Pomélo Paradis "The coral sunrise burned bright and he drove faster. There was no choice but to see her again."

frustrated because it didn't last," says Ganter, who previously worked in the perfume divisions of luxury groups LVMH and Hermès.

The couple became acquainted when Cervasel hired Ganter to work for a company he owned that developed perfumes under license for fashion brands. Soon afterward they fell in love and quit their jobs to start a business. They sold their apartments to raise money and in 2009 introduced **Atelier Cologne**, a collection of highly concentrated colognes that rival perfume's staying power but still have the fresh citrus scents that are cologne's hallmark.

Drawing on the expertise of laboratories in the French perfume capital of Grasse, they concocted their own formulas, adding notes of cedar, ginger, jasmine, and vanilla to the citrus. For each fragrance, they wrote stories describing the image it's meant to evoke. Orange Sanguine, for example, recalls coffee on a seaside terrace in Italy, with "the scent of fresh oranges diffusing in the yellow heat."

Kelly St. John, who runs the perfume and cosmetics division at **Neiman Marcus**, says she remembers Ganter's sales pitch for the brand, over breakfast in Manhattan in 2009. After talking about her passion for cologne, Ganter brought out samples, each wrapped in parchment and bound with a hand-tooled leather band. "It was a beautiful story, with tremendous handcrafted details, an entirely new way to do fragrance," St. John says. Neiman Marcus and **Bergdorf Goodman** became the first retailers to carry Atelier Cologne. St. John says it's been a hit with



\$150

customers who want "exclusive niche fragrances they can't find anywhere else."

Although Atelier Cologne has headquarters in Paris and its scents are French-made, Ganter and Cervasel say they focused first on the U.S. because Americans are more willing than the French to experiment with new products. "France is the most difficult market in the world," Cervasel says. With U.S. retailers, Ganter says, "things happened quickly. That's not very French."

Atelier Cologne opened its first store in Manhattan in 2011. Since then it's opened one in Brooklyn, three in Paris, and another in Hong Kong. All feature industrial-chic workbenches and metal stools, part of an effort to position the brand as a hip alternative to traditional perfumes.

Most clients are in their 30s, still young but able to afford its prices: A 100-milliliter (3.4-ounce) bottle ranges from \$120 to \$250. Atelier Cologne's fragrances are unisex, and some 80 percent of customers are women. "The whole ambience is really attractive," says Lora Lin, a student from Taiwan browsing in the Atelier Cologne boutique near Paris's Place de la Concorde on a recent afternoon. Citrus-based cologne "has become my signature scent," she says.

Atelier Cologne posted €14 million (\$15.3 million) in sales last year, more than half in the U.S. and Asia. Its scents are sold in more than 40 countries by department stores and specialty retailers such as **Sephora**. Armed with €8 million from angel investors and a French state-run investment bank, Ganter and Cervasel plan to open more than 30 additional outlets in cities including San Francisco, Dubai, and Shanghai. They're also working with chains such as **Mandarin Oriental Hotel Group** to provide cologne-based ambient scents in guest rooms and lobbies.

Could Atelier Cologne be snapped up by one of the big luxury houses that Ganter and Cervasel once worked with? Cervasel says they've already received a few overtures. But, he says, "when you're creative, you want to stay independent." —Carol Matlack

The bottom line With millions in fresh funding, Atelier Cologne plans to expand in the U.S., Asia, and the Middle East.

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Small to Big

4Moms

4Moms makes high-tech baby gear for the kind of parents who use an iPhone app to keep track of their infant's feeding schedule and buy Huggies on Diapers.com. Its lineup includes a stroller that folds at the touch of a button (\$850), an oscillating baby seat (\$240), and a self-installing car seat (\$500). Rob Daley, who has a background in venture capital, teamed up with Henry Thorne, a roboticist, to start the Pittsburgh-based company in 2005. The two were convinced that the old-line makers of baby gear would be slow to grasp the opportunity created by rapidly falling prices for sensors and other automation equipment. The 160-employee company logged sales of \$48 million in 2014, but like any small business, it's encountered glitches along the way. Here, Chief Executive Daley recalls one hair-raising product launch. —As told to Cristina Lindblad

Our first product took us about 18 months to bring to market. It was an infant bathtub with a temperature reader. It costs us \$20.84 to make, and we sold it for \$18. We discontinued it after the first year.

Our next product was the mamaRoo. That's an infant seat that moves up and down and side to side to replicate the motions that parents make to comfort their babies. We never talk about it this way to consumers, but it's a two-axis, coordinated-motion robotic platform.

The mamaRoo took us about four years to develop. We were already desperately late with the product. Then, when we moved from prototype production to first line production, we ran into a problem: When you turned those first mamaRoo's on, it sounded like there was a live cat trapped inside.

We were desperate to ship. But we have some words we live by over here: "Good enough isn't; awesome is."

So we signed on for another four months of development. It actually took six. We had a venture capital firm that was supposed to invest at the end of January 2010, but they pulled out. So Henry and I had to circle our wagons. He agreed to put another \$200,000 into the company, which would keep us in business for another 60 days, and I said I would find another investor. We started shipping prototype units to retailers. Before the two months was up, we got Newell Rubbermaid to come in as a strategic investor.

If we had shipped the version that was just good enough, the product wouldn't have gotten any traction. It's a lesson that we've held on to really tightly. Right now, retailers are screaming for our car seat. Investors are screaming, too. But we're spending millions of dollars refining it, 'cause we continue to believe that short-term pain is long-term gain.



The mamaRoo's specs:
Two motors,
four motion sensors,
one screen, companion app

B Edited by Cristina Lindblad
and Dimitra Kessenides
Bloomberg.com



You only know one direction
for your business –
FORWARD.

So why let your business
credit card hold you back
FROM MORE CASH?



**SWITCH TO THE SPARK® CASH CARD FOR
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The Female

Solidarity,

48

Feminism is being branded
and sold like never before.

Who is it
really helping?

Feel



Have-It-All, -Good Machine

By Sheelah Kolhatkar



The first sign that one is at a women's empowerment conference is that there are women on the stage at all—the all-male panel discussion remains an inescapable part of modern life. The second sign is the footwear. Picture

Lands' End CEO Federica Marchionni, Women in the World Summit, Apr. 23

Fox News' Megyn Kelly, *Fortune's*

50



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Fox News' Megyn Kelly, *Fortune*

If Tina Brown, the celebrated former editor of *Vanity Fair* and the *New Yorker*, is there, you know you've reached the summit, literally. Her annual Women in the World Summit, a venture she launched in 2010, has done so well that it sold out 2,500-seat venues four years running and expanded overseas, showing that it was possible to monetize female rage. People pay up to \$300 per day to attend, and the summit was profitable from its very first year, thanks to sponsorships by such blue chip backers as Toyota Motor, Dove, Google, and MasterCard. October's inaugural Women in the World London was packed morning to night with activists from around the world reliving their struggles, movie stars sharing life secrets, politicians, and royalty. During breaks, women milled around a crowded lounge, nibbling on popcorn and tweeting. Adding to the Burning-Man-for-feminists vibe, a gal in a camel's hair coat passed out postcards soliciting donations for a Mary Wollstonecraft memorial ("from well before the Suffragettes!"). When asked why she was there, Eddie Harrop, a young handbag designer with a cascade of blond hair, said, "I want to be inspired." Haseena Latheef, the founder of an ethical online fashion retailer, chimed in that she was also seeking motivation. "You think you've got issues in life," she said, "and then you hear what these women are up against."

➔

Is Tory Burch on the dais, outfitted in her own designs, talking about how women need to believe in themselves more? How about Diane von Furstenberg, saying, "I have never met a woman who is not strong"? Perhaps Jessica Alba, the actress

PREVIOUS SPREAD: GETTY IMAGES (8), MICHAEL OSTUNI/WOMANCON (1), SHE SUMMIT (2), WOMEN IN THE WORLD (1); THIS SPREAD: MARCHIONNI/ANDREW TOH/GETTY IMAGES; KELLY PAUL MORIGI/GETTY IMAGES; MORRISON PAUL ZIMMERMAN/WIREIMAGE.COM; TRUMP MONICA SCHIFFER/FLM/AGC; BURNS JOSHUA LOTTA/P/GETTY IMAGES; WALLACE HEIDI GUTMAN/GETTY IMAGES; VANDERFLOET COURTESY OF VANDERFLOET.COM; ROYZ 11 MPN RAD RAKET/GETTY IMAGES; MARCHIONNI JAMIE MCCARTHY/WIREIMAGE.COM; NEWMARK GARY GERSH/WIREIMAGE.COM

Helping the Women Help the Women

FLOTUS, Angelina, and Melinda lead the empowerment stampede



She's under 25! Listen to her



Mm-mm close the wage gap



Ursula gets invited to so many conferences, she may need to make copies of herself



Ivanka loves women! She's not speaking for her dad

		The Politician	The Millennial	The Foodie	The Entrepreneur	The CEO	The Activity	The Author	The Man	The Global Perspective	Price of 2015 conference ticket
The Actress	The Activist	Michelle Obama	Brit Morin BRIT + CO	Denise Morrison CAMPBELL SOUP	Alexa von Tobel LEARNVEST	Ursula Burns XEROX	Predawn yoga	Anne-Marie Slaughter UNFINISHED BUSINESS	Warren Buffett	Samantha Power U.S. AMBASSADOR TO THE UN	
Patricia Velásquez	Shiza Shahid THE MALALA FUND	Baleka Mbete SPEAKER, SOUTH AFRICA NATIONAL ASSEMBLY	Kelly Lovell YOUTH MOBILIZER	Julie Smolyansky LIFEWAY KEFIR	Anu Duggal FEMALE FOUNDERS FUND	Lisa Gersh GOOP	Power circles	Elizabeth Gilbert EAT, PRAY, LOVE	Deepak Chopra	Wided Bouchamaoui 2015 NOBEL PEACE PRIZE	\$2,000 to \$4,999
Lily Tomlin	Jane Fonda	Mary Robinson SEVENTH PRESIDENT OF IRELAND	Alix Generous AUTISMSEES	Ina Garten	Lynda Weinman LYNDA.COM	Ivanka Trump IVANKA TRUMP COLLECTION	Indigo Girls	Roxane Gay BAD FEMINIST	Jimmy Carter	Priya Agarwal MERCK FOR MOTHERS	\$1,000 to \$1,999
Mamie Gummer	Emily Núñez CAVNESS SWORD & PLOUGH	Laura Flores PERMANENT REP. OF PANAMA TO THE UN	Stacey Ferreira 2 BILLION UNDER 20	Kerry Diamond YAHOO FOOD	Leslie Blodgett BARE-MINERALS	Vicki Escarra OPPORTUNITY INTL.	Networking cocktail reception	Sheryl Sandberg LEAN IN	Craig Newmark	Atti Riaz CHIEF INFORMATION TECHNOLOGY OFFICER, UN	\$400 to \$999
Angelina Jolie Pitt	Ashley Judd	Kirsten Gillibrand NEW YORK SENATOR	Tavi Gevinson ROOKIE	Kristy Lewis QUINN POPCORN	Gina Bartasi EGGBANXX.COM	Federica Marchionni LANDS' END	Board-breaking ceremony	Gayle Tzemach Lemmon ASHLEY'S WAR	Aamir Khan MOVIE STAR	Sister Rosemary Nyirumbe ST. MONICA'S GIRLS TAILORING	\$300 to \$399
Gwyneth Paltrow	Opal Tometi BLACK LIVES MATTER	Nicolle Wallace FORMER WHITE HOUSE COMMUNICATIONS DIR.	Francesca Ramsey DECODED	Martha Stewart	Alison Pincus ONE KINGS LANE	Soledad O'Brien STARFISH MEDIA	Boyz II Men	Heidi Durrow THE GIRL WHO FELL FROM THE SKY	Ayinde Howell VEGAN CHEF	Melinda Gates GATES FOUNDATION	\$200 to \$299
Jessica Alba	Gloria Steinem	Cecilia Abbott FIRST LADY OF TEXAS	Marquesha Babers POET	Rachael Ray	Megan Grassell YELLOWBERRY	Ingrid Vanderveldt EMPOWERING A BILLION WOMEN BY 2020	Breakfast and mimosas	Anne-Marie Slaughter UNFINISHED BUSINESS	Bert Jacobs LIFE IS GOOD		\$100 to \$199



As seen on The View



How's she going to measure that?



"Once again, McDonald's is transforming an outdoor space to put on a concert, dance party and generally awesome opportunity to chill with friends new and old, eat, drink, and of course have plenty of fun!"
—BlogHer



Climb the ladder of success in reasonably priced activewear



The Craig'slist founder wants men to invest in women-owned businesses

She added that expectations of being thin and perfect-looking only add to the stress. “When I come to these events and see all of these women doing all these amazing things—it’s pushing me and motivating me to go forward,” she said. “I wonder—if men just sat down and let women do things, maybe some amazing things would happen.”

There wasn’t much time to contemplate the question, because as soon as Women in the World wound down, more summits were about to begin. In fact, it was possible to spend almost every single day last fall at a women’s empowerment or networking event of some kind. The Monday following Brown’s event saw the opening evening of *Fortune*’s Most Powerful Women Summit, geared toward high-level women in the corporate world. Before that lavish three-day extravaganza closed, two more competing women’s conferences were vying for social media attention: the Women’s Forum Global Meeting, in Deauville, France (“to strengthen the influence of women throughout the world”), and the Grace Hopper Celebration of Women in Computing, in Houston (hashtag #OurTimeToLead).

On Oct. 23, MSNBC host Mika Brzezinski launched her Know Your Value conference in Boston, which was to be the first in a nationwide series. The Women in Policing Conference (“Hear Them Roar!”) was sandwiched in there. Earlier in the month, there was the Inc. Women’s Summit (“Be Inspired, Be Empowered, Get Equipped”), followed by the S.H.E. Summit (“the world’s most accessible women’s empowerment conference”). And that was just October. There’s also TEDWomen, Jump Forum, Leap Conference, BlogHer, Watermark, Women Rule Summit, the 3% Conference for women in advertising,

Women’s Entrepreneurship Day, a woman’s conference sponsored by nearly every state and industry, including by several investment banks, plus dozens of one-off panels all year long. In what may be a sign that the branding of women’s issues is immune to irony, the National Football League hosts its first-ever Women’s Summit during Super Bowl week on Feb. 4. Coming off a string of player domestic abuse scandals and cheerleader lawsuits over fair pay, it’s called In the Huddle to Advance Women in Sport, and it features Serena Williams and Condoleezza Rice.

Having been to many of these events, and having eagerly participated in a few, I can attest that they’re often stirring and, yes, inspirational. It can be galvanizing to be around so many females with superhuman résumés, to hear their tales of

surviving corporate battles or even actual wars. You often leave with a rosy glow, a sense of resolve, and a commitment to do more, for other women and for yourself. But then you return to your desk, probably next to a higher-paid male co-worker, and the old, familiar malaise sets in. There was no discussion of changing policies or lobbying members of Congress. No e-mail list to stay in touch and organize. In the end, one wonders if the explosion of these events is a reflection of how far women have come or proof that they haven’t made much progress at all. Why, in spite of all the energy these conferences generate, are women still just...talking?

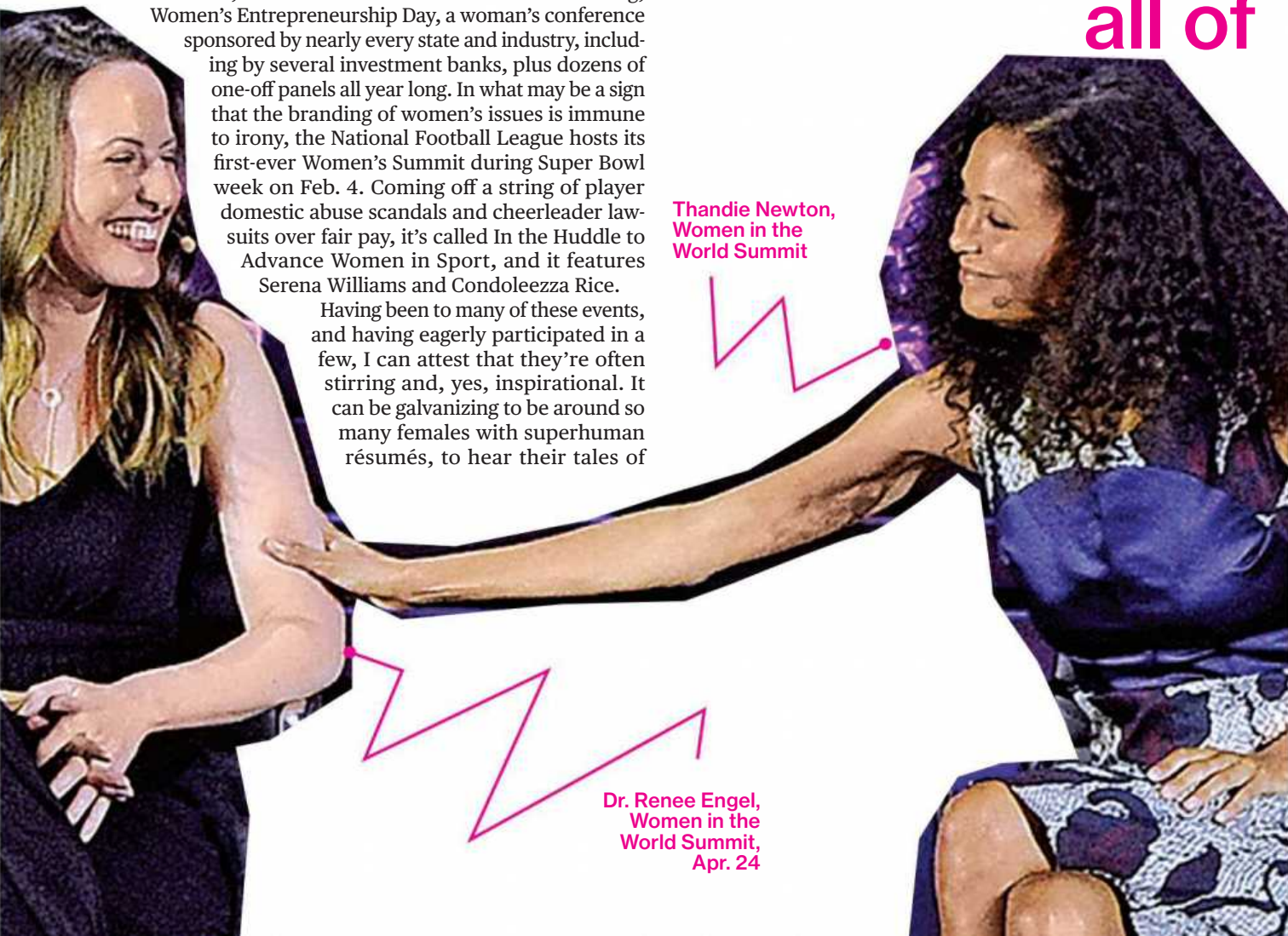
“Women are constantly being exhorted to lean in, to push the corporate envelope, to push their careers higher. And they want to. So the good news is they’re taking it on themselves to organize these sorts of events,” says Michael Kimmel, the author of *Angry White Men* and a rare male speaker at such events. “But the bad news is, they have to go outside of their companies to get it. Why? Because they can’t get the real support and understanding they need in such consistently male-dominated companies.”

Most political activity around women’s issues in the U.S. has been consumed for decades

“When I come to these events and see all of

Thandie Newton,
Women in the
World Summit

Dr. Renee Engel,
Women in the
World Summit,
Apr. 24



with a war just to keep abortion legal, a right that was supposed to have been won in the 1970s. Members of Congress spend thousands of taxpayer hours fighting over whether Planned Parenthood, the largest provider of health care to women, should even be allowed to exist. While all the oxygen is sucked up re-litigating these old questions, issues such as family leave, affordable child care, equal pay, and the persistent lack of women decision-makers get neglected. The women's empowerment business has risen up to fill the void—for a fee.

"I don't think there's much link between the growth of women's conferences and the advancement of women," says Anne-Marie Slaughter, president of the New America Foundation and author of *Unfinished Business: Women, Men, Work, Family*, who's in constant demand as a speaker. "As long as we talk about all these issues as 'women's issues,' we'll never get there. If the point is advancement of women, this is not the way to go."

Slaughter points out that many of the conferences serve a valuable business purpose, giving women the chance to network and schmooze the way men have always done on golf trips and in skyboxes. "I enjoy them because I meet lots of fantastic women doing fantastic stuff," she says. "But I don't think you should confuse that with increasing the number of women in the workplace. I don't think the chief cause of not advancing women is lack of contact."

While the phenomenon is everywhere now, when Brown started Women in the World six years ago, she says, "it was like pulling teeth to get a sponsor." The first year the summit was

held in a "tiny" theater with 350 seats, and Hewlett-Packard was persuaded to provide about \$600,000 in seed money. Brown, who'd launched *Talk* magazine (which closed in 2002) and the *Daily Beast* (later folded into *Newsweek*), was in the midst of her own professional reinvention. This time, her talent for sniffing out the Next Big Thing didn't fail. Toward the end of the Aughts, she says, she could see the beginning of a "global women's movement" and wanted to create a newsy live event around it.

"It took off like a bucking bronco," she says, sitting in her bright corner office in the headquarters of the *New York Times*, which recently formed a partnership with Women in the World and provided office space. "By the third year the response and the demand was so intense, we realized we could move to a much bigger sponsorship." She and her senior executive producer, Kyle Gibson, who spent years as a producer with ABC News, intentionally search out fresh, heart-twisting stories, and barely let the speakers rehearse to ensure that the discussions are as raw and tear-jerking as possible—"you can't be squeamish about the content," Brown says. Toyota signed up as a top, seven-figure sponsor, providing cars to shepherd conference delegates and backing a contest for female entrepreneurs who are featured onstage. After its expansion to London, the summit made its first appearance in India in November. "That is really the concept that I crave," Brown says. "To make this into a global platform."

When she started, the only real competitor—although the two are very different—was *Fortune*'s Most Powerful Women Summit, which has been around since 1999. The summit is aimed at the true cream of XX-Factor American business—chief executive officers, chief marketing officers, board members, and senior VPs. The inaugural conference had one sponsor, Women & Co., a unit of Citigroup offering money management for women. Since then the franchise has exploded, with more companies interested in sponsoring than it can accommodate—other consulting firms are lined up in wait in case Deloitte decides not to renew.

The major sponsors last year included Citigroup and Zurich Insurance, and contracts are estimated by others in the industry to be in the low seven figures, although Pattie Sellers, an assistant managing editor at *Fortune* who's shepherded Most Powerful Women since its infancy, won't confirm this. Registration for the main summit and four related events clocks in at \$10,000, up from \$8,900 last year. Women relish the opportunity to troll for clients and share survival stories while gliding through the carpeted hallways between events. "You know, we raise the price and the wait list gets longer," Sellers says. "It's a good business." She pauses. "It's a *very* good business."

Once they get going, conferences can be highly profitable, which is vital for print magazines that have watched advertising revenue evaporate. (The company that owns this publication has embraced that strategy.) It's so lucrative that *Fortune* created a handful of spinoffs, including Most Powerful Women Next Gen, for younger women leaders. The bound conference agenda booklet is fat with ads for Cadillac and Johnson & Johnson.

In 1999 there were two women running Fortune 500 companies. Today there are 20. It's a gain, but still a very long way from parity. Women's representation in Congress has inched up, from 11 percent in 2001 to 19 percent. Women make up only 24 percent of senior executive positions at the largest companies and 19 percent of corporate board seats. Privately, women from such industries as finance and consumer goods lament that the number of women moving up at their companies has hardly improved from when they started 25 years ago.

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Women's events are a subset of the broader conference business, which, according to IBISWorld, has grown to \$13.4 billion in annual revenue, a figure that includes trade shows. The TED Talks, which helped usher in the conference age and have self-replicated into a zillion inspirational spores, are run by a non-profit, the Sapling Foundation. According to a talk given by Chris Anderson, who has run it since 2002, TED generated \$27.8 million in revenue from its conferences in 2012, largely because it persuades 1,400 people each year to pay thousands of dollars to come. Even conferences that are priced at the lower end of the market, such as BlogHer, an event geared toward female bloggers that charges \$199 for two days, claim to break even because of the generous sponsorship deals, despite spending \$2 million to \$3 million to put on the show.

"I would note, we have a lot of men's conferences, too," says Sallie Krawcheck, a former chief financial officer of Citigroup. "Know what they're called? 'Conferences.'" During earlier phases of her career, as she was clawing her way up the ranks of Wall Street, she says she relied on women's networking events and the connections they forged. When she started out, Krawcheck says, she was one of only two women stock analysts at Sanford C. Bernstein. There were so few women on Wall Street in general, she had very few peers she could compare notes with.

Krawcheck is now CEO of Ellevest, a women's investing platform which is designed to help shrink the gender-investing divide. In the late 1990s, her pet peeve was when the big banks started their own mandatory groups and seminars for their tiny minority of female employees. "There'd be an all-day diversity meeting for women, you'd be invited specially or be expected to go, and you'd all talk about diversity stuff for a day," she says. "And then you'd leave, and no one would get promoted! And you'd think, 'I spent a day away from work, I have kids at home.' And they'd do the same thing with the people of color." The outside conferences, she believes, are in a different category, having to continuously impress their audiences to get them to come back.

For her series, Brown knew she wanted to avoid "how to" in favor of stories about women doing extraordinary things in the face of adversity. She then bundled these into a Broadway-caliber show curated like an issue of *Vanity Fair*, a mashup of rape victims and Oscar winners. Like her best issues, the result is a mix of high and low, of sob stories and rubbernecking, train wrecks and aspirational glamour—and no small amount of stagecraft. On opening night in London, she stood alone in a pool of light on the red carpet, outside Cadogan Hall, a concert venue in the center of the city. A few minutes later, a black sedan drove up and came to a stop. Even the paparazzi fell quiet as the car door opened and a long, slender leg emerged, terminating in a crystal-encrusted pump. Queen Rania of Jordan had arrived.

Brown rushed over as the queen slid out of the car and grabbed her wrists.

"Thank you for coming," Brown said.

They walked, holding hands, toward the entrance. Every few steps they paused as the flashbulbs went off like fireworks. When they reached the door, they turned and swept down a set of stairs and into a VIP reception. Later that night, the queen opened the summit with an earnest interview about the plight of Syrian refugees in Jordan, to a rapt audience.

Late in the afternoon the following day, there was a panel called The End of Misogyny? An eclectic group of women was ushered onstage, including the playwright Bonnie Greer and Charlotte Proudman, an English barrister whose excoriation

of an older male lawyer who made suggestive comments to her on LinkedIn went viral and turned her into a feminist hero.

"Is the end of misogyny a pipe dream?" asked the moderator, the historian Dr. Amanda Foreman, in an elongated English accent. "We're going to try to answer that question in the next 29 minutes." She paused for a moment and glanced at her notes, as if contemplating the dozens of directions where a discussion on whether misogyny could be eradicated might go.

The conversation moved like a locomotive through questions about pornography, abortion rights, the role of the media, the definition of feminism ("I mean," Foreman asked, "is there anybody in this room who is not a feminist?"), whether the online world is sexist, race, how feminism in Pakistan was at a very different stage (obviously) than it is in the western world—many girls there can't even go to school and are married off at age 14.

It was bleak. Greer gamely rummaged around for something positive to say. "This mess, it's crumbling," she said. "A snake always fights hardest when it's going down. We need to be ready when the stuff falls down so that we can move on to the next level. This is a very exciting time."

Then, Dr. Foreman asked Zing Tsjeng, the U.K. editor of *Broadly*, *Vice's* women's website, what advice she would offer to her younger self 10 years into the future. Tsjeng shrugged her shoulders and sighed. "I would like to be able to tell her that it was all worth it. Because it does feel like we're at this point in time where it's one step forward, two steps back," she said. "Even though we have Beyoncé standing on a stage with the word 'feminist' in block letters behind her, it still feels like we are fighting for very basic things."

The Harvard economist Claudia Goldin, who studies women and the labor force, has been to some women's events and left feeling discouraged. She characterized them as focused mainly on "low-hanging fruit," while avoiding the more complicated structural questions that would make a difference to large numbers of women, such as figuring out how to pressure American employers to reduce the need for face time. "I don't want to liken it to a difficult disease, but it really is like that," Goldin says. "Everyone knows some people get cured of disease X, let's call it cancer, and some people die of it. So they go to events where there are professionals with 'M.D.' after their name, and they think that they're holding the key to something. And sometimes they're just quacks."

She believes the idea that individual women can address the problem is misguided—that telling them if they only try harder, ask for more raises, and make the right choices, everything will work out, is wrong. "Everyone thinks that pretty soon they're going to come to a fork in the road, and this is their way of figuring out where the right part of the fork in the road is," she says. "But what they don't realize is, that isn't the issue. The issue isn't what they're going to do. It's something bigger."

"This mess, it's crumbling. A snake always fights hardest when it's

Michelle Obama, *Fortune's* Most Powerful Women Summit, Oct. 13

"Change is always through a collective action," says Carroll Smith-Rosenberg, an emeritus women's studies professor at the University of Michigan. "It has individual leaders who are terribly important. But change is not one person acting in isolation. It has to become collective. And I don't know if you see any collectivity coming out of these meetings."

Slaughter, the author of *Unfinished Business*, says most of the women on conference stages are corporate actors, under pressure—either explicit or self-imposed—to gloss over problems at their companies. And that's why they rarely admit that they have experienced or even witnessed sexism or discrimination, as a group of Hollywood actresses such as Jennifer Lawrence and Lady Gaga lately have. And the complex (and expensive) scaffolding they have holding their big jobs up is usually carefully hidden from view.

She says that if she were to design a practical lineup of conversations intended to help women in their careers, she would start by making the most prominent women she could find describe their real domestic arrangements, including whether their husbands stay home and shoulder most of the parenting. She would also encourage discussions about new ways to think about structuring one's career to allow for flexible periods when they're needed, and honest revelations about the trade-offs and compromises involved. And she would talk about what kind of action is needed to really change corporate culture. To further that goal, companies—even the NFL—could actually do something concrete, such as appointing more women to their

boards, in return for the good PR, as journalist Ann Friedman recently suggested in *New York* magazine. "Not 'Gee, you can do anything you want if you just try hard enough,'" Slaughter says. "That's corporate rah-rah-ism. That's not the reality."

going down. We need to be ready ...so that we can move on to the next level"

Preachers have long known about the power of the live appeal, the rousing sermon that precedes the passing of the basket. Marketers refer to it as "experiential" marketing, and it's one of the healthiest segments of the conference business.

For the closing night dinner at the *Fortune* summit, at the Mandarin Oriental Hotel in Washington, Michelle Obama was scheduled to deliver the keynote speech. The dinner was held at the National Portrait Gallery at the Smithsonian American Art Museum, amid paintings of great figures from American history: the Founding Fathers, inventors and scientists, war heroes, etc., mostly dudes, obviously. The most successful women

in American business would drink Napa Valley wines and listen to the first lady, followed by an interview with

Xerox CEO Ursula Burns and U.S. Chief Technology Officer Megan Smith on the subject of getting more girls interested in math and science.

There were gold brocade tablecloths and white orchid bouquets and an array of exotic ceviches on the menu. While the talk onstage for the past three days had been strictly

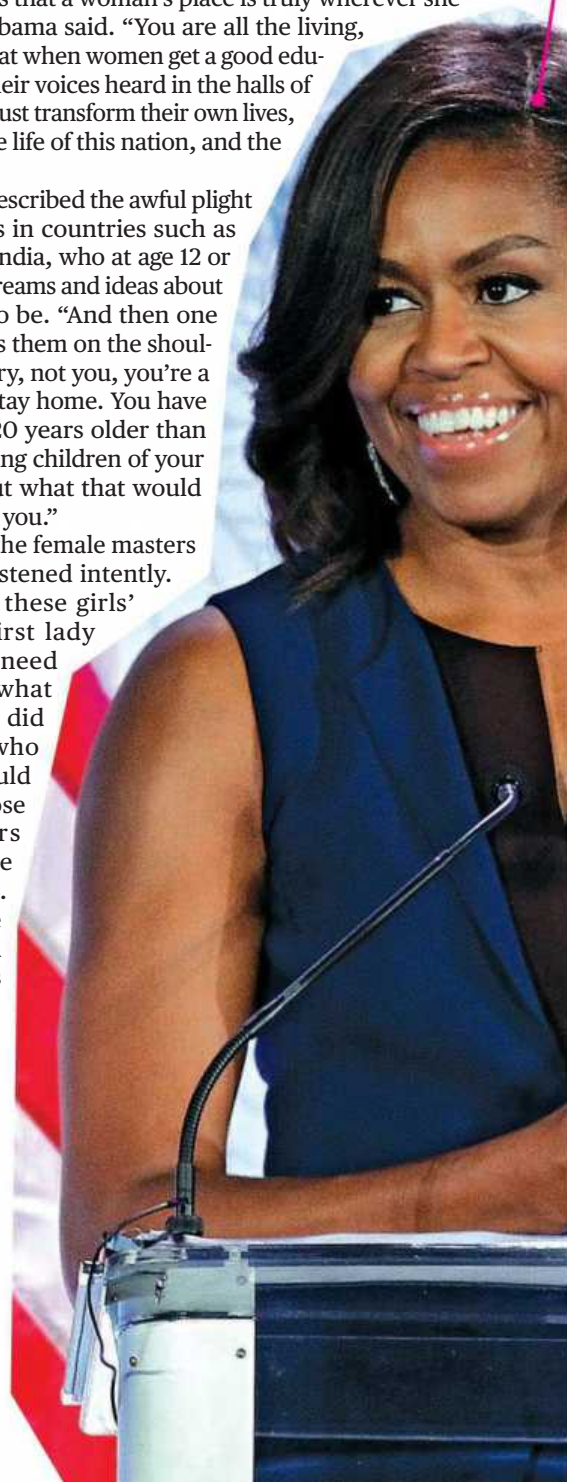
family-friendly, the dinner tables quickly erupted into feverish gripe sessions about how exhausting it is to fight one's way through the corporate boys' club day after day. The attendees lamented that there seemed to be so few junior-level women working their way up behind them. After all that they had struggled to accomplish, what had really changed? Then Obama appeared behind the podium in a navy dress, her eyes gleaming, and the room fell silent. She was there to talk about her new initiative, Let Girls Learn, created to help girls around the world who don't have access to formal education. She was asking the most powerful women in America to help.

"You lead organizations that are changing people's lives. And by shattering just about every glass ceiling imaginable, you have shown us that a woman's place is truly wherever she wants it to be," Obama said. "You are all the living, breathing proof that when women get a good education and have their voices heard in the halls of power, they don't just transform their own lives, they transform the life of this nation, and the entire world."

The first lady described the awful plight of 62 million girls in countries such as Afghanistan and India, who at age 12 or 13 are filled with dreams and ideas about what they want to be. "And then one day, someone taps them on the shoulder and says, 'Sorry, not you, you're a girl. You have to stay home. You have to marry a man 20 years older than you and start having children of your own.' Think about what that would have been like for you."

As she spoke, the female masters of the universe listened intently. "We need to be these girls' network," the first lady continued. "We need to do for them what so many women did for us. Women who fought, so we could walk through those classroom doors and down those halls of power. And into those C-suites. We need to get these girls into school."

The lady executives furiously Instagrammed her with their phones as she talked. By the time she finished 16 minutes later, though, most of us had put our phones down and were choking back tears. **B**





DuPont, China, and a billion-dollar color
By Del Quentin Wilber
Photograph by Jamie Chung

DuPont, China, and a billion-dollar color
By Del Quentin Wilber
Photograph by Jamie Chung

There's white, and then there's the immaculate ultrawhite behind the French doors of a new GE Café Series refrigerator. There's white, and then there's the luminous-from-every-angle white hood of a 50th anniversary Ford Mustang GT. There's white, and then there's the how-white-my-shirts-can-be white that's used to brighten myriad products, from the pages of new Bibles to the hulls of superyachts to the snowy filling inside Oreo cookies.

All this whiteness is the product of a compound known as titanium dioxide, or TiO_2 . A naturally occurring oxide, TiO_2 is generally extracted from rutile and ilmenite ore and was first used as a pigment in the 19th century. In the 1940s chemists at DuPont refined the process until they hit on what's widely considered a superior form of "titanium white," which has been used in cosmetics and plastics and to whiten the chalked lines on tennis courts. DuPont has built its titanium dioxide into a \$2.6 billion business, which it spun off as part of chemicals company Chemours, in Wilmington, Del., last fall.

A handful of other companies produce TiO_2 , including Kronos Worldwide in Dallas and Tronox of Stamford, Conn. Chemours and these others will churn out more than 5 million tons of TiO_2 powder in 2016. China also produces large amounts of the pigment, and its industries consume about a quarter of the world's supply. Most of China's TiO_2 plants, however, use a less efficient and more hazardous process than the one developed at DuPont. Starting in the 1990s, if not earlier, China's government and Chinese state-run businesses began seeking ways to adopt DuPont's methods. Only they didn't approach the company to make a formal deal. According to U.S. law enforcement officials, they set out to rip off DuPont.

"At first, you're like: Why are they stealing the color white? I had to Google it to figure out what titanium dioxide even was," says Dean Chappell, acting section chief of counterespionage for the FBI. "Then you realize there is a strategy to it." You can't even call it spying, adds John Carlin, the assistant attorney general in charge of the U.S. Department of Justice's national security division. "This is theft. And this—stealing the color white—is a very good example of the problem. It's not a national security secret. It's about stealing something you can make a buck off of. It's part of a strategy to profit off what American ingenuity creates."

Most trade-secret theft goes unreported. Companies worry that disclosing such incidents will hurt their stock prices, harm relationships with customers, or prompt federal agents to put them under a microscope. Theft of trade secrets also rarely results in criminal charges because the investigations are time-consuming and complicated, and it's difficult to win a conviction

for conspiracy to commit economic espionage. A 2013 study estimated that China accounted for as much as 80 percent of the \$300 billion in losses sustained by U.S. companies from the theft of intellectual property. Often, China won't even release the records or serve the subpoenas that might contribute to a prosecution. To win in court, companies must prove they properly safeguarded their trade secrets, something many fail to do.

DuPont/Chemours does shield its titanium dioxide process. Guards patrol its plants, which are surrounded by tall fences. Visitors have to be escorted and are forbidden from taking photographs. Documents and blueprints must be signed out, bags inspected. Employees sign confidentiality agreements and are relentlessly drilled on protecting proprietary information. Work is compartmentalized so that few employees have access to everything in a plant. The company vets all its contractors.

Even so, as documents and testimony in a 2014 federal trial in San Francisco revealed, a naturalized American citizen, business owner, and technology consultant named Walter Liew stole DuPont's protocols for producing its superior titanium white from 1997 through 2011. He even took blueprints for a factory and used the information to win contracts worth almost \$30 million. FBI agents and federal prosecutors now consider the Liew case a watershed in their understanding of Beijing's pursuit of U.S. intellectual property. Liew's defenders say the U.S. targeted a hardworking, resourceful entrepreneur to protect the bottom line of a massive U.S. corporation—that DuPont was less victim than aggressor, recruiting law enforcement to stifle competition.

Titanium dioxide arrives at DuPont's plant embedded in rock and must be separated out and refined. When DuPont first produced the pigment, it relied on a crude, messy method known as the sulfate batch process. By the late 1940s, however, DuPont's engineers had developed a more efficient approach: the chloride route.

The basics are public knowledge. First, the ore is fed into a large ceramic-lined vessel—the chlorinator. There it's mixed with coke (pure carbon) and chlorine and heated to at least 1,800F. "The material inside here resembles lava. This is like running a big volcano," Daniel Dayton, a former top executive at DuPont, told jurors about the chlorinator in 2014. (Chemours and DuPont declined to comment for this story.)

Hot gas in the chlorinator gets piped out and condensed into a new compound called titanium tetrachloride, or "tickle," as engineers call it. The tickle is heated again, subjected to various purifying chemical reactions, and cooled. Now a yellowish liquid, the tickle is inserted into a second vessel, called the oxidizer. It's again heated to very high temperatures and mixed with oxygen; the reaction knocks the chlorine molecule off the titanium, and two oxygen molecules attach to the titanium in its place. The resulting particles are so fine that the white stuff has the consistency of talcum powder.

Other companies have developed chloride-route processes, but Chemours's is considered the best. Company executives have said they spend \$150 million a year to improve the procedure, even if it's just to boost production by 1 percent. The company has "a particular way of combining things that are proprietary and nonproprietary and make it work," Assistant U.S. Attorney Peter Axelrod told jurors in 2014. "And that process, that system, that technology, is what the Chinese government and the state-owned entity wanted," he added, referring to a company we'll come to in a moment. To get this info, they relied on Liew.

Now 58, Liew appears in photographs to be a short, slim man with a youthful, bespectacled face, big ears, and parted dark hair. According to friends, associates, and reams of trial testimony and interviews with U.S. law enforcement officials, Liew was successful but didn't feel successful enough. He was a charmer who could quickly exploit someone's weaknesses and a compulsive diarist. He kept thousands of pages of notes and records that were eventually used against him in court.

Of Chinese heritage, Liew was born in Malaysia in August 1957. He grew up poor, the second-youngest of nine children of a subsistence farmer. He sold ice cream on the side of the road. "We were busy day and night," Pong Chiyu, a brother-in-law, wrote to a federal judge on Liew's behalf. "Life was tough, but Walter Liew was still very hardworking in his studies."

Liew excelled at school and traveled overseas to earn his college degrees—a bachelor's from Taiwan University and a master's in electrical engineering in 1982 from the University of Oklahoma. He worked for Hewlett-Packard before starting a technology consulting firm in 1989, fulfilling a personal dream. "Walter's ambition really was to be more than a midlevel engineer," Stuart Gasner, his lawyer, told jurors. "He wanted to make money. He wanted to have his own business and what that entails." In 1991, at 34, he married a Chinese woman named Christina (it was a second marriage for both), and they became naturalized U.S. citizens before the decade was through.

The same year he married, Liew was invited to a banquet in Beijing at which government officials thanked him for being a "patriotic overseas Chinese." According to FBI agent Kevin Phelan, who supervised the investigation of Liew, "the banquet became his calling card." In a 2004 letter to win a titanium dioxide contract from a Chinese company, Liew described meeting at the banquet Luo Gan, then the secretary general of the state council, Beijing's top policymaking body. Luo provided him with "directives so that I would better understand China and continue to make contributions to her," Liew wrote.

As Axelrod, the federal prosecutor, later put it in court: "Mr. Luo provided Mr. Liew with directives. And those



Liew

directives, through Chinese agencies, included key task projects for the benefit of the Chinese government. Chief or key among those was the development of chloride-route TiO_2 technology. And with Mr. Luo's directives to Mr. Liew, so began a 20-year course of conduct of lying, cheating, and stealing."

Liew didn't respond to letters seeking comment, and messages left with his wife weren't returned. Gasner said in a statement, "Walter Liew is a small-business man who took on an ambitious project and ran head on into two powerful forces, the DuPont Corporation and a federal government, eager to find economic espionage where China is involved."

In the mid-'90s, Liew established ties with Chinese corporations and officials and landed a contract to design a plant in Zhuzhou, producing acrylic resin, a paint additive. The plant was built—a genuine success for Liew. As his work on the project wound down, he turned to TiO_2 . It's not clear why he did so. Most likely, U.S. law enforcement officials say, Liew realized the money was too good to pass up. "There is a much bigger long-term payday in titanium dioxide," Phelan says. "He knew that."

In 1997, Liew and two American associates met with executives for a steel company in Chengde, an industrial city northeast of Beijing, that was seeking to build a titanium dioxide plant. Liew knew little about the substance, but he was confident in his ability to navigate what had been billed as an introductory get-to-know-you session.

When Liew and his partners entered the conference room, they were shocked to face 50 of the company's engineers, who peppered them with detailed questions they couldn't answer. One of the Americans, Michael Marinak, a chemical engineer by training who had been consulting with Liew since 1993, watched the fiasco with growing dread, he says in an interview. He pulled Liew aside and told him they needed to end it immediately, if they hoped to escape with their reputations.

Determined never to be embarrassed in that way again, Liew and his associates went online and began searching for those who knew something about DuPont's chloride-route

The Chloride Route

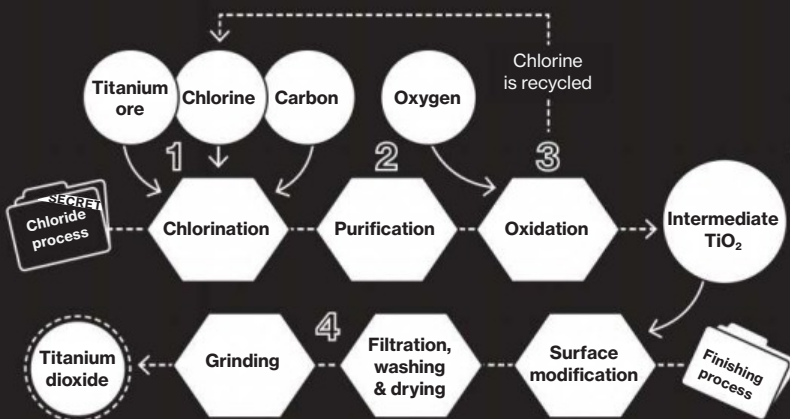
DuPont's titanium oxide process maintains close control of particle size, which produces TiO_2 with high tinting strength for brilliant whites. The chloride-route process uses less energy, labor, and is more environmentally safe than the sulfate process used in most of China's TiO_2 plants.

1 The process developed by DuPont begins with raw rutile ore.

2 The minerals are reduced by removing chlorides of metals other than titanium leaving highly pure titanium tetrachloride.

3 The TiCl_4 is oxidized at high temperatures to produce very bright intermediate TiO_2 .

4 The intermediate TiO_2 goes through a finishing process in which it's washed and ground to size to maximize brightness.



process. They found Tim Spitler, a 49-year-old former DuPont engineer living in Reno, Nev. In October 1997, Liew, his wife, and Marinak piled into a small car and drove from Oakland, Calif., to Reno to pay him a visit.

The four met in a hotel room and later had dinner. Marinak doesn't recall much about the meeting, he says, because he was battling a painful blood clot in his leg. FBI reports of interviews with Spitler are somewhat contradictory in describing what transpired. (Spitler, who had been expected to testify at Liew's trial, killed himself in early 2012, not long after Liew and his wife were arrested.)

According to the FBI documents, the relationship between Liew and Spitler lasted for years. Liew flattered Spitler, who was bitter about DuPont's business strategies and its decision in the '90s to fire thousands of employees. Spitler also admitted to agents that he felt insecure about not having attended a top university (he got a degree from Tri-State University in Angola, Ind.) and was constantly worried about losing his job. Liew made Spitler feel valued and understood. He sent him a gift basket every Christmas, the FBI reports show, and helped pay for the funeral of Spitler's daughter, who committed suicide in 2006. When Spitler would call to thank Liew for his generosity, the businessman would steer the conversation to business and titanium dioxide.

Spitler provided Liew with information about DuPont's processes—even sketches of key components—and allowed him to root through boxes in his house and take whatever records he found. Spitler told federal agents that Liew paid him \$15,000 for DuPont-related documents, including a blueprint to a plant in Delaware. The schematics provided details of flow rates, pipeline sizes, temperatures, and chemical compositions. As such, it was considered one of DuPont's most critical trade secrets, U.S. law enforcement officials contend, and Liew used the documents to prove his bona fides to Chinese executives.

Spitler told agents that he cautioned Liew that building a titanium dioxide factory was a difficult undertaking. "Even with the best technology with stolen prints, but without startup people and maintenance expertise, the plant won't be successful," he warned Liew in a 2000 phone call, according to Liew's own notes of the conversation.

Liew kept an eye out for other former DuPont engineers and, through Internet searches, turned up a company in Wilmington that referred such workers to new employers. Liew arranged interviews and soon was sitting across from Robert Maegerle in a Wilmington office in 1997. Maegerle, then 62, was a balding and paunchy retired mechanical engineer who'd worked at DuPont for 35 years, starting in 1956 as an intern, not long after the company had begun

"There is a mu payday in tita

using the chloride-route process. Maegerle had specialized in titanium dioxide.

Like Spitler, he wasn't pleased with some of DuPont's business decisions, trial testimony showed. He expressed frustration at DuPont's abandonment of a potential titanium dioxide project in South Korea on which he'd been a top engineer. Not long after his interview in Wilmington, Maegerle began consulting for Liew. His work accelerated as Liew began competing for a contract to overhaul a relatively small plant in Liaoning province in northeastern China for Pangang Jinzhou, a subsidiary of the enormous state-run Pangang Group. (Calls and a fax seeking comment from Pangang Group weren't returned. Messages left with the Chinese Embassy in Washington were also not returned.)

In 2004, Liew sent a letter to Hong Jibi, chairman of Pangang Group, explaining why his company should be considered for the work. "DuPont has the most advanced white by chlorination technology, but DuPont's technology has always been highly monopolized, and absolutely not transferable," he wrote. "After many years of follow-up research and application, my company has possession and mastery of the complete DuPont way of titanium white by chlorination."

Over the course of winning this contract and another from Pangang Group, Liew showed Chinese executives Spitler's blueprints and other sensitive documents. In July 2008, as he was seeking another contract, this one to design a far larger titanium dioxide plant in Chongqing, a sprawling city in southwest China, he provided photographs he'd obtained from Maegerle of DuPont equipment. According to trial testimony, Liew and his wife met with Pangang executives in Beijing and explained how they would build the plant, claiming they had a 16-member team well-versed in making titanium dioxide. That was clearly an exaggeration. Except for Maegerle, none of Liew's employees had a background in producing the color white. Several had been hired through Craigslist. One told investigators his education on titanium dioxide initially consisted of reading Wikipedia.

As they assembled their proposal for Pangang Group, Maegerle fed Liew details from a 407-page manual known as the "basic data document" for DuPont's titanium dioxide plant in Kuan Yin, Taiwan. The document

It's Not Paranoia If ...

1 Six Chinese nationals were indicted in 2013 on charges of conspiring to steal trade secrets from several U.S.-based seed manufacturers.

2 Five Chinese military officers were indicted in 2014 on charges of hacking the computers of U.S. companies and a trade union to obtain trade secrets. They remain at large.

3 A Chinese businessman was charged in 2014 with hacking into Boeing's computers to steal information about U.S. military aircraft and systems.

4 A 62-year-old former employee of PPG Industries, a supplier of manufacturing materials, was charged in May 2015 with stealing the company's secrets and passing them to a glass company in China. He killed himself a month later.

5 Six Chinese citizens, including two university professors, were charged in May 2015 with stealing sensitive mobile phone technology from two U.S. companies and sharing it with the Chinese government.

ch bigger long-term titanium dioxide. He knew that"

contains much of the information needed to build a plant, and DuPont engineers would later uncover more than 120 instances in which their former employee provided the document's details to Liew, according to trial testimony. In a brief letter from prison, Maegerle declined to comment for this story.

The pair's scheming paid off. In May 2009, Liew's company won a \$17.8 million contract to help design the large titanium dioxide plant in Chongqing. In just a few years, Liew had won at least three contracts from Pangang Group valued at \$28 million.

Liew didn't spend it, though. He continued to live in a modest rented house on a cul-de-sac in the hills of Orinda, Calif., about a 30-minute drive from San Francisco. Two of his few extravagances were a maroon Mercedes SUV and a luxurious condominium in Singapore, U.S. law enforcement officials say. "We didn't find any Picassos or anything," says Phelan, the FBI agent. "He was living a very upper-middle-class life."

Liew was wiring most of his proceeds, about \$17 million, overseas. U.S. officials have no idea where that money went or how it was spent.

In January 2009, Liew's company, Performance Group, declared bankruptcy. He claimed just \$4.78 million in revenue from 2006 to 2010, and his companies (Performance Group changed names twice) paid about \$4,000 in taxes. Federal investigators would later determine Liew owed the U.S. government at least \$6 million in back taxes.

In 2009, Pangang Group hired a consultant, a retired DuPont engineer who ran his own firm, to review Liew's work. That engineer, Tze Chao, now 81, had previously provided Pangang Group with DuPont trade secrets, and his job was to ensure that Liew's plans were feasible and contained actual DuPont information, U.S. officials say. Chao added some trade secrets of his own to his report. He later pleaded guilty in federal court to one count of economic espionage; he has yet to be sentenced.

Pangang Group also hired the well-respected Australian consulting firm TZ Minerals International to check Liew's plans. A review by such consultants is typically conducted to protect companies from ending up in legal disputes over the use of proprietary information. However, U.S. law enforcement officials say, Pangang Group had the opposite motive: to confirm that Liew was providing real DuPont plans and processes.

The consultants warned Pangang Group that Liew's company was providing "chlorination technology" that "originates with DuPont," the firm wrote in a report, and recommended seeking "further legal counsel."

Pangang Group ignored the advice, or more likely its executives were pleased to know they were getting the real deal, U.S. law enforcement officials say. But the discovery concerned a top TZMI consultant. He contacted DuPont and told the chemical giant about Liew's firm. His alert came to the attention of Connie Hubbard, DuPont's competitive-intelligence manager, whose job was to coordinate information-sharing among officials in the company and to watch for threats to DuPont's business. TZMI declined to comment.

Hubbard saw that Liew's company was boasting on its website that it had "extensive hands-on experience in fine chemicals" and that its experts have "many years of working experiences from" Dow, DuPont, Rohm & Haas, Chevron, and others. DuPont's lawyers sent Liew a stern letter, asking him to explain how his company had come to master the chloride-route process. Liew never replied, though his website soon dropped references to DuPont's technology. In August 2010, DuPont received its second warning about Liew. An anonymous letter claimed that he and one of his employees had "embezzled Titanium Technology from US Company" and sold it to China. To this day, DuPont executives and FBI agents don't know who sent the letter.

Within a few months, DuPont filed a lawsuit accusing Liew of stealing its trade secrets. It also called the FBI. In July 2011 the agency raided Liew's home and offices in California, as well as Maegerle's home in Delaware. During the search of Liew's home, an agent found Christina Liew's purse in the kitchen. In it were several keys, including one to a safe-deposit box. When an agent approached Christina with the key, a Chinese-speaking agent overheard her husband tell her, "You don't know, you don't know." Christina told the agent she didn't know anything about the key.

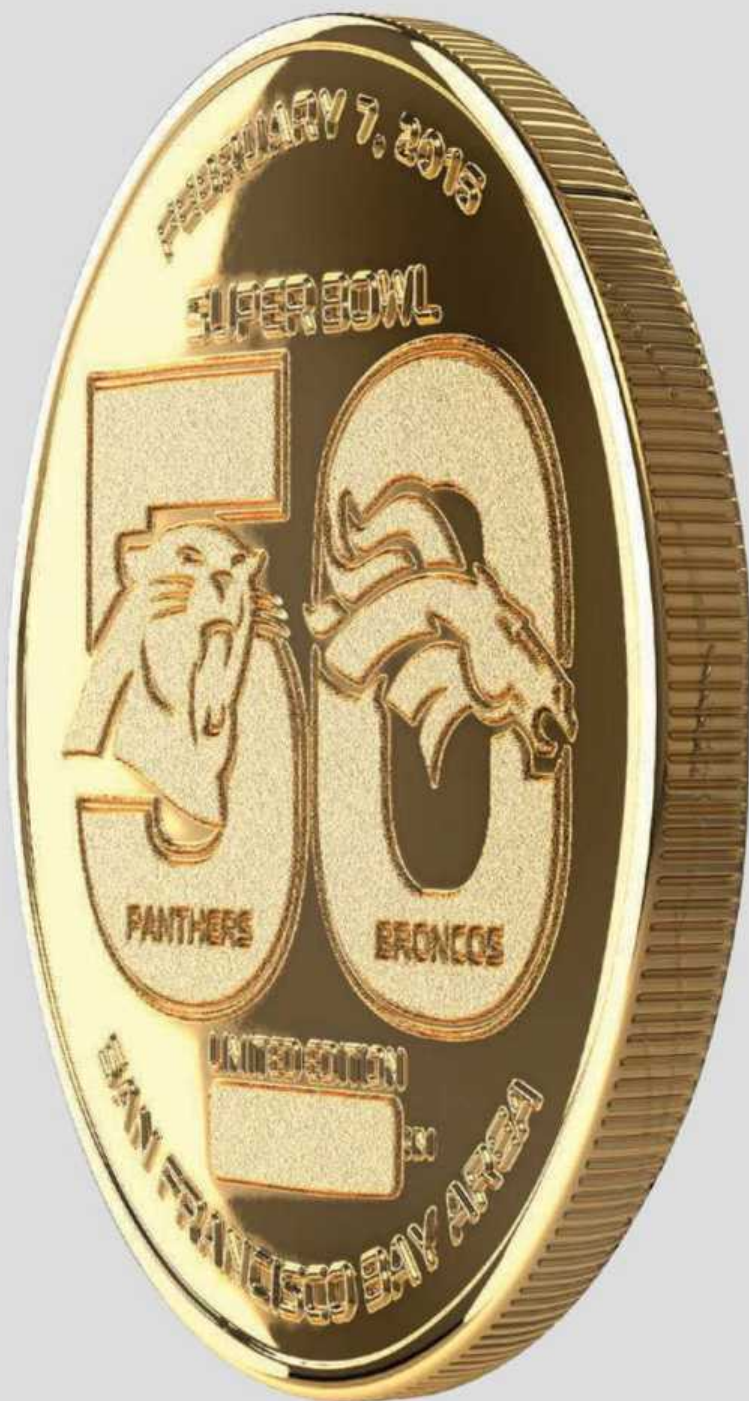
A few minutes later, she asked if she could leave the house to get breakfast, and agents were happy to oblige. They trailed her to an Oakland bank, where they later used the key in her purse to unlock the couple's safe-deposit box, revealing a stash of incriminating files. After visiting the bank, she drove to a run-down motel, where agents spotted her meeting with several Chinese men who were later identified as Pangang Group executives. The FBI raided the motel and recovered records linking the executives from Pangang Group to the Chinese government.

In 2014, Liew was convicted of economic espionage, possession of trade secrets, and tax fraud in federal court and has begun serving a 15-year prison sentence. He's appealing the verdict. Gasner, who represented Liew at trial, maintains that DuPont overstated what Liew shared about its methods, saying they're "commonplace in the titanium dioxide industry." Maegerle was convicted as an accomplice; he's been sentenced to two and a half years for conspiring to sell trade secrets, attempting to steal trade secrets, and conspiring to obstruct justice. In September 2015, Christina Liew, who had pleaded guilty to tampering with evidence, was sentenced to three years of probation.

In China, meanwhile, the Chongqing plant remains unfinished, as far as anyone in the U.S. knows. A smaller plant, in Jinzhou, is operational and is widely believed to use DuPont processes. The Justice Department has charged executives of Pangang Group and three subsidiaries with conspiring to commit economic espionage but has not been able to serve the defendants with an indictment. In a final twist, the Chinese may have gotten what they needed directly from the chemical company. Newly filed court documents reveal that the FBI motel raid found evidence DuPont's computers had been hacked. **B**

Dark Side

By
Caleb Hannan



of the coin

**The secret history of
the company behind the
Super Bowl coin toss**

Just before the start of Super Bowl XLII, as he stood on the 50-yard line of the University of Phoenix Stadium in front of 70,101 impatient fans, head referee Mike Carey was nervous. Not about reaching the highest honor his profession has to offer. Not about blowing a call before a TV audience of 100 million people. What worried Carey on Feb. 3, 2008, was the coin toss.

Although he'd already run through an NFL-mandated dress rehearsal of the flip the day before, other referees had told Carey that, of all possible outcomes in the big game, the prospect of screwing up this short ceremony haunted them the most. (In 2014, celebrity flipper Joe Namath would send the coin up before players even made their call.) "Everything else we'd trained for," says Carey, now an analyst with CBS Sports. "But the toss is this singular moment. The inauguration of the premier event in sports. There's a lot of anxiety."

At least, Carey figured, he'd come away with a collectible. During his 26 years of officiating, he'd made a habit of keeping the coins he flipped. But when the Super Bowl toss he oversaw went off without a hitch (for the record: coin tossed by four-time champ Ronnie Lott, tails, New York Giants ball), Carey didn't even make it back to the sideline before an NFL representative took the coin from him, hustling it toward its ultimate destination, the Pro Football Hall of Fame, where all such pieces are kept.

Flipping a metal disk to determine which group of muscle-bound men gets to play with a football first may sound like a nonevent. But like everything else about the Super Bowl, the simple act has evolved into one of the rites of that pseudoreligious ceremony. The first nine coin flips, like the first nine Super Bowls, featured relatively little pomp, just a referee and the competing teams' captains. From there the stakes grew with the TV ratings, gaining honorary coin-flippers from sitting presidents (Ronald Reagan, via satellite) to military heroes (David Petraeus) and becoming a popular wager for casual gamblers and junkies alike. The betting site Bovada offers more than 500 bets on the Super Bowl—How long will the national anthem last? What color Gatorade will be dumped on the winning coach?—and says the coin toss is among the top five most active.

For all the attention paid to the flip, what's mostly unknown is the story of the company that for 23 years has made the coin itself—and will sell you a limited-edition replica, encased in acrylic along with a certificate of authenticity, for \$99.99. Highland Mint operates out of a palm tree-ringed warehouse in Melbourne, Fla., and has been owned by Michael Kott, 58, since 1993. That's the same year the NFL decided it wanted to turn a profit off the ceremony that started its biggest game. Highland Mint, then a small memorabilia seller, bought the exclusive license

Michael Kott



Irving Kott



to create a collectible coin, and has since acquired licenses for framed photos and replica tickets for the other three major sports leagues, the NCAA, and events such as the Kentucky Derby. A tour of the mint in January finds some 120 employees in room after room, designing and constructing collectibles that are sold online and at retailers such as Bed Bath & Beyond and Neiman Marcus.

A month before the Super Bowl 50 kickoff, and long before it's known the game will pit the Carolina Panthers against the Denver Broncos, Highland Mint has at least 20 Super Bowl 50-marked pieces of memorabilia for sale, ranging from a \$9.99 coin key chain to a framed collection of all 50 flip coins for \$1,500. The company melts its own steel on the premises, and Kott points out a hulking machine recently purchased from the U.S. Mint that workers have dubbed Dr. Doom. Highland Mint appears to be a nifty small business with a piece of the biggest game in America, and that's true. But when it comes to coins, there's always another side.

In April 1993, Highland Mint was owned by a man named James Meadlock, and the company's only products were licensed Major League Baseball memorabilia. Meadlock received an unsolicited call from Kott, who introduced himself as the owner of a Montreal-based collectibles company called Madison Avenue Sports. According to a civil suit Meadlock would later file, Kott told Meadlock that he was interested in becoming Highland Mint's sole Canadian distributor.

Meadlock flew to Montreal to meet Kott and his father, Irving. According to the suit, the Kotts almost immediately offered to buy the entire company. Meadlock agreed to a simple deal. In exchange for Highland Mint, he accepted 120,000 shares in a

company called Hariston, the parent of Madison Avenue Sports. The Kotts portrayed Hariston as a company on the rise. They told Meadlock that it owned a successful supermarket chain in Poland that would soon make a killing by expanding into other Eastern bloc countries in the post-Cold War gold rush. Even more enticing, according to Meadlock's suit, was Hariston's proprietary technology, which the Kotts claimed could turn contaminated groundwater into valuable precious metals, a process they said was already employed at a mine in Butte, Mont., and would eventually be used worldwide.

The lawsuit Meadlock filed in Brevard County, Fla., in 1996, alleged that almost everything the Kotts told him wasn't quite true. There were a few Polish grocery stores but no plans to expand. The groundwater cleanup technology was a bust in Butte. And Meadlock alleged that merchandise sold by Madison Avenue Sports had been artificially overvalued by a fake newsletter produced, in secret, by Madison Avenue Sports itself, and the company had been forced to buy back the products to pacify irate customers. (Irving Kott died in 2009. A motion to dismiss Meadlock's suit was filed, but Michael Kott declined to comment on the matter.)

Meadlock discovered that Irving, a Montreal native, was well-known to securities regulators around the world. By the time of their initial meeting in Montreal, the elder Kott had survived two assassination attempts, including a prematurely detonated car bomb, described in the Canadian press as mob-related, and had received what was then the largest civil fine in Canadian history, for stock fraud. Irving had also run what Dutch authorities described as the most successful boiler room in the world.

According to FBI records, Irving first caught the attention of U.S. authorities in 1964, when he hosted a cocktail party in New York City to impress a mark who would later invest in a mining company secretly run by Irving. Thus began a pattern that would continue for the rest of Irving's life. Shares in highly speculative companies sold by teams of brokers under his control would see their stock price rise spectacularly before falling off a cliff—classic pump-and-dumps. Irving excelled at theatrics. His greatest triumph occurred in Amsterdam in the 1980s with a company called First Commerce Securities. According to *Contrepreneurs*, a book by Canadian journalist Diane Francis, Irving employed a multi-cultural sales force that worked the phones in two shifts seven days a week, every day of the year. He hired foreign nationals to target their countrymen; according to Francis, at one point

he hired an entire theater troupe from London to sell worthless stocks to their fellow Brits. First Commerce was an Amsterdam phone company's largest customer, running up long-distance bills that approached a half-million dollars per month. Dutch prosecutors broke up the operation in 1986, alleging Irving and his sales force had destroyed \$4 billion of investors' money. (*Time* magazine estimated the amount was closer to \$400 million.) Irving, who had fled to Canada, never faced trial because the Dutch had no extradition treaty with Canada at the time. He settled the case against him with a \$4 million fine.

According to *Contrepreneurs*, Michael Kott was a paid consultant to First Commerce, and on the day Dutch authorities raided his father's Amsterdam offices, he met police at the door holding a newspaper that had already run a story on the impending investigation. "What took you so long?" Francis quotes him as saying.

Following the dissolution of First Commerce, Michael became the head of a Florida-based broker-dealer called Greentree Securities, and Irving moved to Los Angeles, where he began renting a \$22,000-a-month Beverly Hills home once owned by Cary Grant and running a brokerage called J.B. Oxford Holdings. One of his clients included a then-unknown New York broker named Jordan Belfort, who needed someone to process trades related to his soon-to-be-legendary stock frauds. "Without Kott, *The Wolf of Wall Street* never gets



Momentous Super Bowl Coin Tosses

1985



Ronald Reagan at Super Bowl XIX (via satellite from the White House)

1993



O.J. Simpson at Super Bowl XXVII

2002



George H.W. Bush at Super Bowl XXXVI

2009



General David Petraeus at Super Bowl XLIII

2014



Joe Namath at Super Bowl XLVIII

made,” says retired FBI agent Michael Switlyk, whose investigation of J.B. Oxford led to a 48-count indictment of Irving from the U.S. Department of Justice. All the claims were dismissed except for two, for inaccurate reporting to the Securities and Exchange Commission, and Irving agreed to pay a \$250,000 fine and make \$750,000 in charitable donations.

In 2004, Mark Cuban, the billionaire owner of the Dallas Mavericks, invested in a promising Canadian Internet company called Mamma.com. Shortly after, Switlyk and others told Cuban that Mamma was secretly controlled by Irving. Cuban sold his stock—a trade that led to his being accused of insider trading by the SEC in 2008. By the time Cuban won his case in 2013, Irving had died peacefully in his Montreal mansion. Inspired by his experience with Irving, Cuban started a fraud-focused website called Sharesleuth that recently made Michael’s Highland Mint a target, accusing the company in an article of selling footballs and helmets with forged signatures, including those of Seattle Seahawks quarterback Russell Wilson, for as much as \$2,500 apiece. Michael Kott, as well as Michael Goldfarb, the president of Who’s Who Productions, a company that supplied the goods, say they’re legitimate.

It can’t have been easy to run a small business for two decades with Kott for a last name. While his father was making enemies with the U.S. Attorney’s office and a billionaire reality TV star, Michael spent his time expanding Highland Mint from nearly nothing into a leader in a market where authenticity is essential. So it’s understandable that Kott seems slightly uncomfortable with the idea of a visit from a reporter. “Is there any reason why you didn’t just call?” he says when I show up at the mint in January.

Kott relaxes a bit once he starts answering questions about his company, its flagship product, and the Super Bowl. The company was on the verge of failure when he bought it, he says, with just 20 employees. This year he expects to produce 10,000 Super Bowl coins, and he’s rooting for Denver, unsentimentally, because he thinks Broncos fans will buy the most coins. This is also the first year in the game’s half-century history that

Mark Cuban has clashed with the Kotts



the official logo, featured on the coin’s obverse, will feature standard numbers. “The Roman numeral for 50 is L,” he says, “and L connotes loser.”

It isn’t until after a tour of Highland Mint’s deafening factory floor that I mention Irving Kott. “I don’t really want to discuss that,” he says. When asked about his own presence at First Commerce in Amsterdam during the raid, he suggests the *Entrepreneurs* author has “watched too many movies.”

Meadlock withdrew his suit against the Kotts in 1996. He now owns a barbecue restaurant in nearby Port Canaveral, Fla. Reached by phone, he’s reluctant to talk about his relationship with Michael Kott. When asked whether he dropped his lawsuit after receiving a settlement, Meadlock says, “I can’t talk about this,” then hangs up. The NFL did not respond to a request for comment on the Kotts.

Kott presents himself as simply a business owner who’s constantly reinventing his company. Under Meadlock, he says, Highland Mint’s main products were replica trading cards sold via “little ma-and-pop stores.” Now it’s his hunk of metal that will be tossed skyward for a global TV audience on Feb. 7. As far as Kott is concerned, there are coins to be made, a Super Bowl to attend, and a past to leave right there, in the past. Or, as he frames it before putting an abrupt end to the conversation, “The sins of the father have nothing to do with the son, right?” **B**

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You know what
they say, Doc ...



...Mo' money,
mo' problems



The rise of wealth therapy
By Caroline Winter

Photograph by
Josh Dickinson

Four years ago, Manhattan therapist Clay Cockrell met a patient with an unusual problem. The 21-year-old college senior said he'd recently received traumatic news. "He seemed scared," Cockrell recalls. "Like, really scared. He wasn't sure he could trust me, so for the first few sessions we just talked generally about his life."

The patient had attended public schools, worked summer jobs as a lifeguard and camp counselor, and drove an old Toyota. During the previous year, he'd struggled to decide what career to pursue after college.

Then, on his 21st birthday, his father, a businessman, called him into his office and dropped a bombshell. According to Cockrell, "the father told his son, 'I've been keeping something from you: We're actually quite wealthy.'" The family, it turned out, owned a multinational corporation.

Learning you're heir to a fortune would be a pretty good day for most people. But rather than celebrate his newfound wealth, the patient grew angry and confused. "He wasn't mentally prepared—no one would be," Cockrell says. "He didn't know who to trust and didn't want his friends to think he was suddenly different, so he didn't tell anyone." Four years later, the patient is still working through his identity crisis while training to take a managerial position at his father's company. "He impulsively bought a really fancy car, but he doesn't want people to see it," Cockrell says. "So he's keeping it in a garage." (Cockrell changed some details to protect the patient's identity.)

It's hard to sympathize with the afflictions of great wealth—especially as income inequality soars worldwide. In the U.S., one-tenth of the top 1 percent owns as much wealth as the bottom 90 percent combined, according to the Institute for Policy Studies. But just because you can burn \$100 bills to keep the estate warm doesn't mean you're at peace with it or immune to being demonized by Occupy protesters or Bernie Sanders. The discomfort of peering over the wealth gap—as well as insecurities about how money can change people and affect relationships, especially in the wake of the financial crisis—helps explain why affluent people are turning to therapy to discuss their First

World problems in private and why banks are incorporating wealth therapy into services for high-net-worth families. "Either there are more problems or there's more recognition for those problems," says Madeline Levine, a wealth therapist and author of *The Price of Privilege*.

Naturally, these shrinks aren't cheap: It's bad business to discount a luxury service for people who can pay for luxury. Therapists counseling the über rich charge up to \$500 an hour for their expertise on topics normally considered taboo. "About 20 minutes into the first session, patients—particularly inheritors—will say, 'I'm so happy I found you, I have no one else to discuss these issues with,'" says Jamie Traeger-Muney, founder of Wealth Legacy Group, a San Francisco- and Israel-based firm geared toward "addressing the emotional impact of wealth on individuals, couples, and families." About a dozen psychologists and wealth coaches contacted her for wealth therapy training last year, up from one or two annual requests a half decade ago.

Cockrell, whose patients pay as much as \$450 an hour, stumbled into the field by accident. He grew up in Kentucky, where his father, who never graduated college, runs an auto parts salvage business. In 2005, Cockrell began offering what he calls walk-and-talk therapy, sessions he conducts with patients while strolling through Central Park. Attracted by the novel service, one wealthy patient signed on and spread the word. "Those people all run in the same circles," Cockrell says. Now about 25 percent of his clients are well-to-do. "I'm fascinated by powerful people, what makes them tick," he says. "They're all different, of course, but they have this kind of quiet power—maybe because they know that, in the end, they're probably going to be OK."

Cash can solve a lot of problems. Still, it's been linked with elevated levels of depression, anxiety, psychosomatic issues, and self-mutilation (see below). And occasionally it also leads to Leona Helmsley-level weirdness—the billionaire New York real estate developer left \$12 million to her dog, but no money for two of her grandchildren. This is why much of wealth therapy is geared toward improving family communication to protect shared assets. Wells Fargo, U.S. Bank, and other financial institutions began tapping psychologists around 2007 to help

"People will tell you pretty much anything about their sex lives, but they don't feel comfortable talking about money"

Social Problems of the Rich and Famous

Money might exacerbate some issues, say researchers

Drivers in a "fancy" car are

4x

more likely than ones in a standard vehicle to cut off another driver in a four-way intersection...

...and they're

3x

as likely to cut off a pedestrian.
—Paul Piff, assistant professor, University of California at Irvine

Affluent youth have rates of depression and anxiety more than twice as high as the national average.

—Suniya Luthar, professor, Arizona State University



75 percent of kids from families with an income below \$15,000 feel emotionally "close" to their mother, compared with

high-net-worth broods navigate interpersonal dramas, which often wind up with plaintiffs and defendants bleeding money. “We encourage families to let us interview each member individually, even those who’ve married in,” says Arne Boudewyn, a clinical psychologist who heads Wells Fargo’s Family Dynamics and Education department. It serves moneyed individuals in its Abbot Downing division—good luck not confusing it with Downton Abbey—where the team tries to smooth over conflicts, like those initiated by what Boudewyn calls command-and-control CEO personas. “We tell them, ‘Those strategies worked well for you in the business setting,’” Boudewyn says. “‘You steamrolled your opponents—but in the family setting, a different set of strategies is needed.’” He adds that Abbot Downing shrinks (the bank insists they be called “family dynamics and education consultants” and says they don’t practice clinical psychology) worked with 120 families in 2015, a 40 percent increase over the year before.

Wells Fargo also has a team of five Ph.D. historians who try to get families to appreciate what it took to create their fortunes. “Wealth creators often have these immigrant traits, hard work and perseverance,” Boudewyn says. “By the time you get to the third generation—a critical juncture for whether they’ll keep the wealth or not—you’re often dealing with people who are native to wealth. It’s important to show that generation what’s behind the wealth, how fortunes are made and sometimes lost.”

When reason and history lessons can’t change attitudes, tough love can. “I had one guy complaining that he didn’t have any meaningful relationships,” Cockrell says. “I told him, ‘It may be because you’re an a--hole. You don’t think of anyone but yourself.’ It took his breath away, but he keeps coming to therapy. I may be the only person in the world who calls him on his s---.”

Wealth Legacy’s Traeger-Muney agrees there’s a need to speak frankly about the emotional impact of wealth. Herself an heiress—her father built the roller-skating rink business United Skates of America—she says: “People will tell you pretty much anything about their sex lives, but they don’t feel comfortable talking about money. They don’t feel people will listen in a non-judgmental way.” Many inheritors, she says, suffer from “affluenza,” the feeling of guilt, entitlement, or lack of motivation tied to inheriting or suddenly earning a large sum. Others have what she calls big-boob syndrome: “They wonder, Do people actually like me for myself or because of my wealth? Who can

I trust? We’re not saying these are life-threatening problems, but they’re still problems.”

In December, Traeger-Muney addressed some of them at a workshop in San Francisco with her colleague Emily Bouchard. Seven participants sat on a white couch and floral-patterned armchairs in a Pacific Heights apartment; they’d paid \$475 each to spend the day strategizing how to talk about money.

“We’re going to start with a mindfulness exercise,” Bouchard told the group. “Everyone close your eyes.”

Next, the group took a quiz to find out which of eight money archetypes they most embody and how that might affect their relationships. Tyrants, Bouchard said, use money to control people but often see themselves as underappreciated martyrs. Creative/artist types love money for the freedom it buys but hate being sucked into the materialist rat race. “We used to see a lot of the tyrant

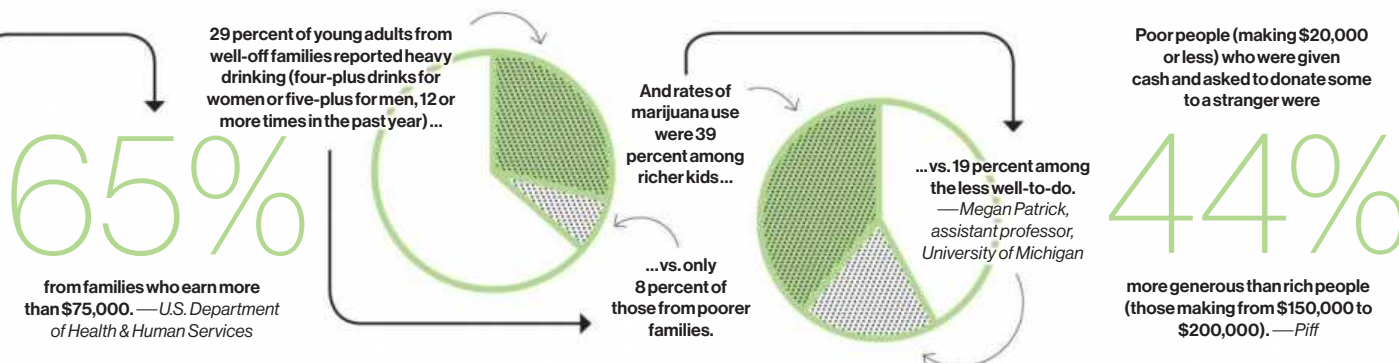
archetype in wealthy families,” Bouchard says. “With more tech people now becoming wealthy, we see more artists.”

After identifying their archetype (all devised by Deborah Price, author of *Money Magic*), each participant drew a family tree labeling relatives: There were innocents, fools, and warriors, too.

No one seemed too tortured by wealth during the session. David Fox, a successful serial entrepreneur, said he signed up to gather information for an online tool he’s building to help business owners handle the interpersonal aspects of selling companies. But the day helped him on a personal level, too. Fox, 56, moved from Australia to San Francisco in the ’90s after selling his first company for millions of dollars. He lost some of that money through risky investments. “The workshop made me think how my fool traits can be helpful in making money but not necessarily in keeping it,” he said. “Money tends to magnify our insecurities and fears—suddenly you have so much to lose.”

Traeger-Muney is open about her own family insecurities. Not unlike Cockrell’s patient who was suddenly swimming in it, her 17-year-old son recently discovered that much of the family’s funds were inherited, not earned. “He had a strong reaction,” she says. “All of a sudden, I saw in my child’s eyes this flicker of lost respect—it really stung.” Luckily, she’d spent her life figuring out how to talk about money. She explained to her son that their money supplemented everyone’s passions, but that you were still expected to work. “We discussed what it means to take money, what it says about who you are—we pulled apart the topic,” she says. “He realized it’s a complex conversation.” **E**

**“Do people
actually like me for
myself or because
of my wealth?
Who can I trust?”**



The spa at
London's Café
Royal hotel

Refresh on Arrival

Even if these treatments don't cure your jet lag, you'll still feel great
By Celia Shatzman

Sydney

QT Sydney's SpaQ

Weekend Warrior, 150 minutes, \$365

This hip Aussie hotel takes a three-pronged approach to curing fatigue. First comes an allover scrub with anti-inflammatory green-tea salt, then a 45-minute massage with rich camellia and sunflower oils, and finally an invigorating facial.

Tuscany

Rosewood Castiglion del Bosco

Sense anti-jet-lag massage, 80 minutes, \$230

The agrarian beauty of this 800-year-old estate screams relaxation—which your 10-hour trip from JFK did not. Drop off your bags and head to the spa for some muscle manipulation with a treatment blending local chamomile, jasmine, and lavender.

London

Café Royal's Akasha Holistic Wellbeing Centre

The Four Elements, 90 minutes, \$300

This historic hotel uses water, fire, earth, and air to combat the main symptoms of jet lag: water retention, stiff muscles, dry skin, and sleep disruption. Think aquatherapy and hot-stone massage. There's also a foot rub—and a scalp rub to stimulate the sleep-regulating pineal gland.

Hong Kong

W Hong Kong's Bliss Spa

Jet Out, 45 minutes, \$24

A full-body massage incorporates pine, rosemary, and eucalyptus, which is known for germ-fighting properties. The rubdown will calm you—and the eucalyptus will help ward off whatever grossness you picked up while locked in that aluminum tube.

HOMeward BOUND

Three spas
for when you land
on U.S. soil

NEW YORK

Park Hyatt's Spa Nalai
*Jet lag therapy, 90 minutes,
\$350*

Full-body exfoliation with heated gloves “will get rid of the dry, itchy skin airplane air causes.”

MIAMI

Viceroy
*Jet lag cure, 80 minutes,
\$215*

The Viceroy turns to Mama Mio's Lucky Legs cooling energizing gel, originally designed for pregnant women, to relieve lower-body swelling.

LOS ANGELES

The Beverly Hills Hotel's Spa by La Prairie
*Travel recovery, 120 minutes,
\$400*

Part deep-tissue rubdown, part cell-renewing facial, this two-hour session will make you forget all about where you are—let alone where you were.

DON'T PLAY IT AGAIN, SAM

There's a better way to listen to music. By Devin Leonard

A few months ago, I signed up for Apple Music. As part of the introductory process, it asked what artists I like. Drake? OK. Future? Sure. John Coltrane? Definitely. Based on this cursory exchange, Apple started recommending music to me. I got a torrent of the latest rap and a lot of jazz from the late '50s. The problem was, I already knew most of it. Where was the new stuff I really wanted to hear?

Ben Ratliff, a jazz and pop critic for the *New York Times*, has the same concern about music-streaming services. As he writes in *Every Song Ever: Twenty Ways to Listen in an Age of Musical Plenty* (Farrar, Straus & Giroux, \$26), you can easily find any bit of recorded music on the Internet, whether it's on Apple Music, Spotify, or some other streaming service that licenses music from record labels; on YouTube, which relies on its audience to upload tracks; or on one of the many illegal download sites.

But rather than using this almost infinite variety to broaden our palates, many of us let algorithms feed us a diet that's no different from what we already enjoy. Ratliff compares it to being "fed our favorite meal repeatedly." It sounds unappetizing, and that's his point.

Genre, Ratliff says, is just a marketing construct. He urges us to resist the software that relies on this categorization and instead seek out music based on more musically profound characteristics such as speed, sadness, density, and loudness. This leads him to some surprising comparisons (right): In a chapter about repetition, he finds commonalities between the seminal minimalist composer Steve Reich and Kesha, the millennial pop star. For quiet and stillness, he prescribes the austere work of Morton Feldman, the intimate balladry of Nat King Cole and Chet Baker, and Metallica's *All Nightmare Long*.

Ratliff's "sadness" playlist includes: **Mozart** (*String Quartet No. 19*), **Slayer** (*God Hates Us All*, *Flesh Storm*), and **Etta Jones** (*I'm Through With Love*)

Artists that have a "voice within the voice": **Young Thug** (*No F---s*), **Joni Mitchell** (*Big Yellow Taxi*, *In France They Kiss on Main Street*), and **Dean Martin** (*If, Just in Time*)

THE
ALGORITHMS
ARE WORKING
AGAINST US

Strong "single note" performances: **The Ramones** (*I Wanna Be Sedated*), **Brian Eno** (*The True Wheel*), and **Drake** (*Furthest Thing*)

Metallica also turns up, fittingly, in the chapter about loudness.

Writing about music (not lyrics) isn't easy, and few do it as well as Ratliff. He notes that the wonderfully gloomy British singer-songwriter Nick Drake used close tunings on his steel guitar, enabling him to play "a spray of notes that sound huddled close together." He has thoughtful things to say about metal, a vital but misunderstood medium: "It is metal's prehistory that keeps it moving. Its roots extend to fire and plague myths."

In a chapter about artists with what he refers to as "wasteful mastery," Ratliff celebrates Dean Martin as a guy who made a career of singing as if he was in the shower: "He almost commands you to relax your standards, or to think differently about the purpose of art."

My one complaint about the book is that it could be more user-friendly. It's full of playlists, but they can't always be easily replicated on Apple Music; my guess is Ratliff did this intentionally, so we'd do the work for

ourselves. That's yet another problem with streaming services: They have hundreds of thousands of songs but not much by, say, La Monte Young, a leader of the American minimalist movement, whom Ratliff extols in the repetition chapter. (I had to seek Young out on YouTube.) I was able to cobble together most of Ratliff's "wasteful mastery" playlist, including songs by artists such as Martin, Lil Wayne, Lou Reed, Fats Waller, Young Thug, and Nina Simone. It's a hoot, and it sold me on the book's central concept.

Despite the occasional difficulty or disappointment, I'm more optimistic about streaming services than *Every Song Ever's* author. Apple's algorithms may be serving me the usual Kanye West and Thelonious Monk, but the service also has actual humans curating many of its genre pages. They've introduced me to some new jazz musicians, like Ibrahim Maalouf, a French-Lebanese trumpeter who plays a four-valve instrument. The flesh-and-blood curators promoted him not because they thought I'd like him. They thought he was someone I needed to hear—and they were right. **B**



DITCH THE BRIEFCASE

*Six sleek portfolios—
plus the gloves to match*
By Laura Bolt and
Jon Roth

**A.P.C. LOCK
DOCUMENT HOLDER**
\$485; usonline.apc.fr

The envelope style and rich, camel-colored leather will always feel contemporary.

Pair it with
A similarly classic fur-lined option, like these
Barbour utility gloves.
\$89; barbour.com

**VALEXTRA
BIG PORTFOLIO**
\$1,720; valextra.com

As unadorned as they come, but the forest-green leather and piped edges add a little intrigue.

Pair it with
Dents driving gloves for an equally sophisticated, sporty vibe.
\$95; mrporter.com

**PAUL SMITH
DOCUMENT POUCH**
\$795; paulsmith.co.uk

Tired of black, gray, or navy? Plum can be as versatile—and the patterned detail lends some personality.

Pair it with
Modish fingerless mittens by **Barena Venezia** to complement its petite proportions.
\$75; barneys.com

POKETO MINIMALIST FOLIO

\$58; poketo.com

A slim, modern take in waterproof polyurethane. Try it in a neutral color such as olive green—instead of shiny black—to keep your look from getting too 2050.

Pair it with

Timeless shearling gloves from **Hestra**.
\$270; mrporter.com

THOM BROWNE EMBOSSED DOCUMENT HOLDER

\$980; mrporter.com

Perfect for the detail-obsessed: The stamped leather looks abstract from far away, but up close you'll see leaves, birds, and flowers.

Pair it with

Deerskin gloves by the **Arrivals** for some subtlety and touchscreen-compatible fingertips.
\$95; thearrivals.com

THIS IS GROUND MOD LAPTOP 2

\$399; thisisground.com

Choose from custom add-ins such as the traveler insert, which has slots for your passport, foreign currency, and hand sanitizer.

Pair it with

Loro Piana's **Gilles** gloves, made of crocodile and calfskin. They're so comfortable, you might not even want to take them off when you get inside.
\$4,875; loropiana.com

A KINDER, GENTLER SUPER BOWL

Advertisers are playing it safe this year. By Gerry Smith

Remember watching the Super Bowl last year when that Nationwide ad came on? It featured a boy with tousled hair—so cute, right? And then the boy explained that he would never ride a bike, travel the world, or marry, because he was killed in a preventable home injury. The depressing spot generated so much backlash that the company issued a statement saying it intended “to start a conversation, not sell insurance.” The ad started a conversation, for sure, getting mocked mercilessly on Twitter: @KenJennings: “The Seahawks haven’t completed a pass but on the plus side I haven’t killed any of my kids”; @DanGrazianoESPN: “No one in the Nationwide advertising meeting put up their hand and went, ‘Let’s sleep on this?’”

Despite its poor execution, the ad was part of a trend toward longer commercials that pull on our heartstrings—one that many advertisers are expected to expand on this year, making emotional appeals to our better angels and abandoning humor and sex. Colgate will encourage viewers to save water while brushing their teeth. Anheuser-Busch InBev plans to introduce an ad campaign that promotes equal pay for women with this year’s Bud Light spot; last year the brand’s “Up for Whatever” ads were criticized for being tone-deaf to sexual assault. And GoDaddy, which made its name by pushing the boundaries of decency in previous championships, won’t air an ad during this year’s game for the first time in more than a decade. This is leading industry execs to ask: Has the Super Bowl gone soft? Advertisers “have been effectively

neutered,” says Ian Schafer, founder of the Deep Focus agency.

Although not all brands have disclosed their plans, most are likely to fall in line. Last year two of the most popular ads were a McDonald’s spot that featured customers paying for meals with hugs and one from Always, the feminine products maker, urging girls to be confident. Commercials with sexual overtones have declined from 20 percent of the spots to 6 percent in the past two years: The big game is now “a family-oriented event,” and viewers no longer tolerate objectifying women, says Peter Daboll, chief executive

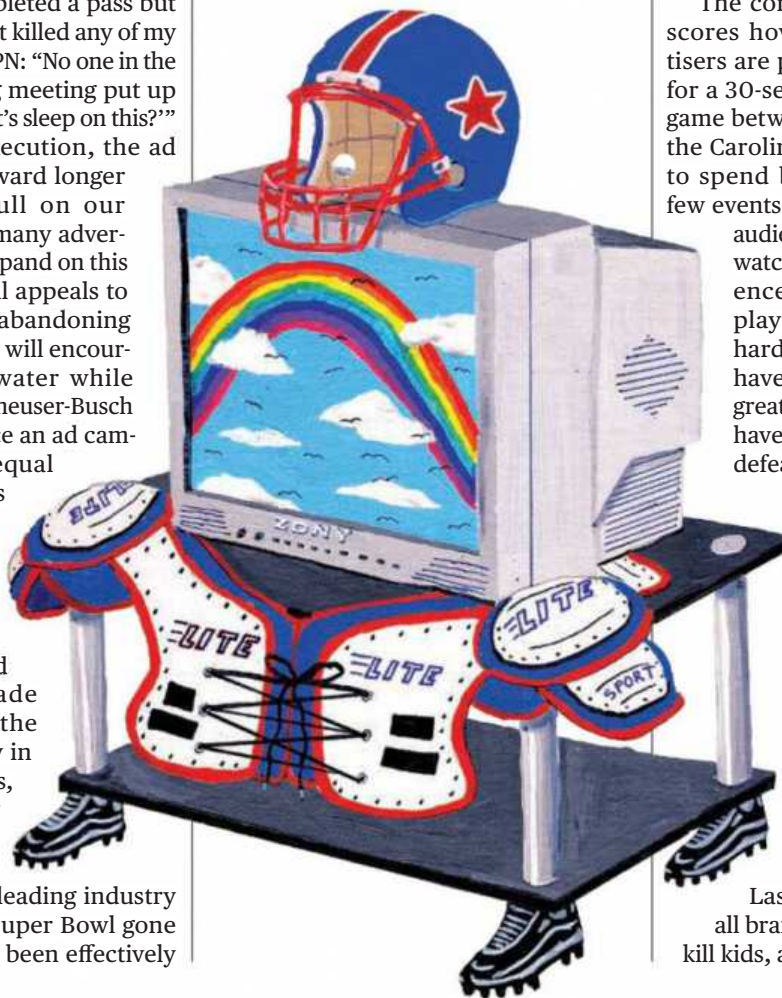
officer of analytics firm Ace Metrix. And since 2010, the percentage of ads deemed “humorous” has dropped, from 71 percent to 49 percent, while the share of those considered “inspirational” has risen, from 2 percent to 22 percent.

This year advertisers may be even more conservative given growing tension about race relations and other national concerns. “There’s a lot of sensitive issues facing the country right now,” says Timothy Calkins, a professor of marketing at Northwestern’s Kellogg School of Management. “Advertisers are going to work very hard to stay away from that.”

The conservative approach underscores how much is at stake. Advertisers are paying CBS about \$5 million for a 30-second spot during the Feb. 7 game between the Denver Broncos and the Carolina Panthers. They’re willing to spend big because it’s one of the few events that still draw a massive live audience—about 114 million people watched last year, the largest audience in TV history. Of course, playing it safe can also make it harder to stand out. “When you have one inspirational ad, that’s great,” Daboll says. “But when you have 12 in a Super Bowl, it kind of defeats the purpose.”

With the game’s viewers spanning different ages, genders, and political persuasions, it’s hard to make a commercial that appeals to everyone. So almost every year, one brand sparks controversy. Two years ago, Coca-Cola had people of various ethnic backgrounds singing *America the Beautiful* in their native languages. The ad backfired in some quarters, and people tweeted with the hashtag #SpeakAmerican.

Last year it was Nationwide. So all brands have to do this year is not kill kids, and they should be fine. **B**



JING WEI

29, illustrator, New York

THAKOON

& OTHER STORIES

METALEPSIS PROJECTS

COLLETTE ISHIYAMA

CATBIRD

ALI GOLDEN

DIEPPA RESTREPO

What makes an outfit work for you?

It's all about comfort and simplicity—and then throwing on something unexpected. I like to have a simple foundation and then some pops here and there with fun accessories or a patterned jacket.

Like the one you have on.

I found this at a sample sale! At the time I was working on some floral patterns, and the idea migrated into my wardrobe. I like things that inspire my art, so if I see an interesting print, it can influence what I'm doing.

Where's your skirt from?

A boutique called Swords-Smith that's close to my studio. I've been wearing more black recently.

What's your day-to-day like?

I'm a freelance illustrator and usually work out of a studio in Greenpoint, Brooklyn. I'm also a brand illustrator for Etsy and teach a class once a week at the Pratt Institute.

That's a lot of gigs.

Yeah. I run around a lot, so I wear outfits that accommodate different situations.

Why's that?

Having more black helps me not think too hard about my clothing choices—though I make sure there's some contrast. Otherwise it can get a little Goth.

What do you look for when shopping?

I don't really care about brands, but it's important that clothes are versatile and fit well.

Your shoes look crazy comfortable.

They are—and they're really sturdy. I like pieces I can hold on to for years and years.



DEREK LAM

Designer

THE NEW SCHOOL
PARSONS

"I did a year and a half at Boston College. I was studying business and history and realized I wanted to pursue an artistic career."



With partner and co-founder Jan-Hendrik Schlottmann, 2003

"It was fast fashion in Hong Kong. I got to know my roots and enjoy life outside of New York."



Anna Wintour at a Derek Lam fashion show, 2004

"I was traveling a lot and also doing Derek Lam, but the exposure to a large luxury company and a worldwide audience were both great benefits."



Gwyneth Paltrow in a Tod's ad campaign, spring 2008

Education

St. Ignatius College Preparatory, San Francisco, class of 1984

Boston College, 1984-85

Parsons School of Design, New York, class of 1990

Work Experience

1990-94

Junior designer, head designer, Michael Kors

1994-98

Design director, G2000

1998-2002

Design director, Michael Kors

2006-11

Creative director, Tod's

2002-Present

Co-founder and designer, Derek Lam



A sketch for Michael Kors, 1994

"My father was one of the early American businessmen to go to China—he imported fabric and embroidered goods. My mother worked with him."



"I learned what it means to be a designer, what it takes, and ultimately that I love it."

With Amy Adams for the CFDA/Vogue Fashion Fund competition, 2005



"We did our first runway show in 2003 and launched a spring collection in 2004. This month we're launching a new fragrance line and relaunching our Derek Lam Collection shoe business—so, keeping busy."

Life Lessons

"I ran into Michael Kors's partner, Lance LePere, on Seventh Avenue, and he told me to come up and see Michael."

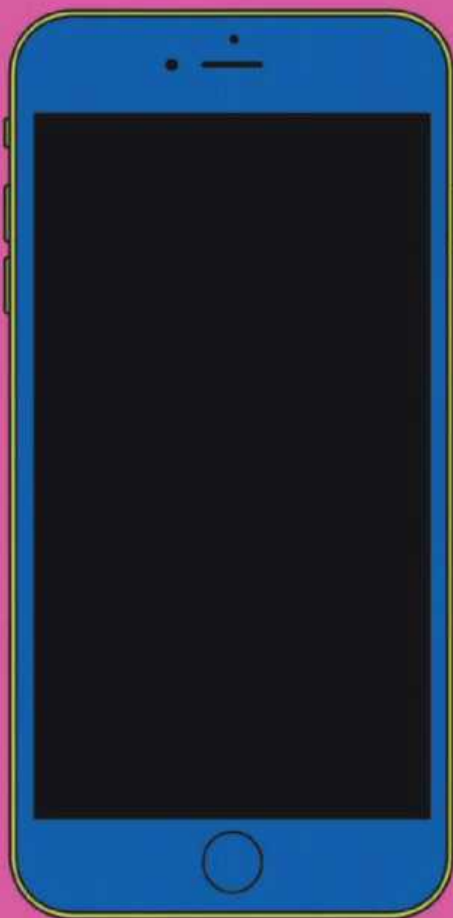
He offered me a job. Only in New York."



Kors



LePere



MICHAEL CRAIG-MARTIN

IPHONE 6S

One of the best-known artists of his generation, Michael Craig-Martin has created a limited edition print exclusively for the Serpentine. Produced on the occasion of his exhibition *Transience*, which focuses on his painting and drawing practice through the lens of technology, it depicts the latest model of this popular smartphone.

serpentinegalleries.org/shop
editions@serpentinegalleries.org

Michael Craig-Martin, *iPhone 6s*, 2015
Digital print on Hahnemühle photo rag bright white
70 x 50 cm (image size 32.6 x 32.6 cm)
Edition of 100 + 11APs
£600 + VAT (Total: £720)

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